TORONTO

REPORT FOR ACTION

10-Year Circular Economy Road Map

Date: October 15, 2025

To: Infrastructure & Environment Committee

From: Executive Director, Environment, Climate and Forestry and General Manager,

Solid Waste Management Services

Wards: All

SUMMARY

As the largest city in Canada, the people and businesses of Toronto are significant consumers of materials and goods, a majority of which end up in landfills that are quickly approaching capacity. A circular economy refers to a society-wide approach to production and consumption that aims to eliminate landfill waste and maximize resources by recovering as much as possible from used products. Transitioning to a circular economy not only supports sustainability, but also sparks innovation, creates jobs, addresses climate change and reduces costs related to waste management.

The City has been working on its circular economy transition since Council set an aspirational goal in 2016 to work towards zero waste and to make Toronto the first municipality in the province of Ontario with a circular economy. Building on this work, the City has developed its first "Circular Economy Road Map" (the Road Map) (Attachment 1).

The Road Map was shaped by valuable input from residents, Indigenous people, industry and peer cities around the world, including London (UK), Glasgow, Rotterdam and members of the Canadian Circular Cities and Regions Initiative. It sets out a vision for Toronto's circular economy transition over the next 10 years through five Strategic Directions and 15 Actions to support waste reduction and sustainable consumption in Toronto, with a focus on addressing wider consumption behaviours that generate waste. Through the Road Map, the City will deliver incentives, supports and programs for residents and businesses that make circular solutions easy and accessible. It will also lead by example by embedding circular practices into its own operations, while also identifying and addressing barriers to create an enabling environment for businesses and community to pursue their own circular innovations.

The Road Map will be implemented by multiple City Divisions using a whole-of-city approach (see Attachment 2 for the City's 3-Year Circular Economy Road Map Implementation Plan). City staff have identified key initiatives to prioritize beginning in 2026, which include communicating the benefits of circularity, establishing forums to

hear from circular businesses, identify barriers and co-develop solutions and determining whether existing resources and programs, such as the Green Market Acceleration Program, could be used to support circularity. Additionally, the City will assess the feasibility of a reuse hub to stimulate a secondary market for construction materials and is seeking Council authority to implement a second intake period of the Circular Food Innovators Fund (CFIF), a grant program that supports businesses in implementing reuse systems that eliminate single-use and takeaway items.

Implementing the Road Map is expected to further strengthen Toronto's leadership profile and position the City among the global peer cities that are advancing the transition to a circular economy. Furthermore, the Road Map actions support the City in adapting to trade uncertainties and affordability concerns, with the circular economy offering a framework for enabling supply chains and businesses to become more resilient by decoupling operations from the extraction of natural resources, increasing material security and reducing exposure to price volatility. Beyond supply chain considerations, circular solutions offer a pathway to reduce greenhouse gas (GHG) emissions that cannot be addressed by the renewable energy transition alone, including global GHGs attributed to the production of materials, products, food and land management. A transition to circular business models offers an opportunity for circular jobs and skills building, innovation and new business partnerships and creates the pathways for residents to consume more sustainably and make the most out of the things they purchase through strategies like reuse and repair.

City staff will provide regular progress updates to City Council on the implementation of the Road Map. The first update will be delivered in 2029, following the initial three years of implementation (2026–2028).

RECOMMENDATIONS

The Executive Director, Environment, Climate and Forestry and the General Manager, Solid Waste Management Services recommend that:

1. City Council direct the Executive Director, Environment, Climate and Forestry, with the support from the applicable City Divisions, to implement the *Circular Economy Road Map* and 3-Year Circular Economy Road Map Implementation Plan, as presented in Attachment 1 and 2, respectively, to the report dated October 15, 2025 from the Executive Director, Environment, Climate and Forestry and the General Manager, Solid Waste Management Services.

¹ Rajaonson, Juste. (April, 2025). A stronger Canadian economy starts with a circular economy in cities and regions. Policy Options, https://policyoptions.irpp.org/2025/04/circular-economy/

² Jensen, Henrik Hvid. (February, 2024). How the circular economy secures manufacturing supply chains. World Economic Forum. https://www.weforum.org/stories/2024/02/how-manufacturers-could-lead-the-way-in-building-the-circular-economy

³ Canadian Climate Institute. (March, 2023). How circularity can contribute to emissions reductions in Canada. https://climateinstitute.ca/wp-content/uploads/2023/03/how-circularity-can-contribute-emissions-reductions-canada.pdf

⁴ Circular Economy, Solutions for Youth Employment, and International Labour Organization. (May, 2023). Decent work in the circular economy. https://cdn.prod.website-files.com/5d26d80e8836af2d12ed1269/6459fd6277ede78534464251_20230424%20-%20CJI%20-%20Decent%20work%20in%20the%20circular%20economy%20-%20210x297mm.pdf

- 2. City Council authorize the Executive Director, Environment, Climate and Forestry, or their designate, until December 31, 2036, to negotiate, enter into, and execute non-procurement agreements, as may be required, to support the implementation of the *Circular Economy Road Map* and the 3-Year Circular Economy Road Map Implementation Plan, as presented in Attachments 1 and 2, respectively, to the report dated October 15, 2025 from the Executive Director, Environment, Climate and Forestry and the General Manager, Solid Waste Management Services, with the non-profit, private, and public sectors to:
 - (a) Collaborate on research, projects, forums, or initiatives;
 - (b) Provide in-kind and/or financial support from the approved Environment, Climate and Forestry budget and that is within the Executive Director, Environment, Climate and Forestry financial authority;
 - (c) Data sharing; and/or
 - (d) Accept funding and/or in-kind support

with each non-procurement agreement being on such terms and conditions acceptable to the Executive Director, Environment, Climate and Forestry, and each being in a form satisfactory to the City Solicitor.

- 3. City Council direct the Executive Director, Environment, Climate and Forestry, in consultation with the General Manager, Solid Waste Management Services, to report back in 2029 on implementation of the Circular Economy Road Map and provide an updated implementation plan for the years 2029 to 2031.
- 4. City Council authorize the implementation of a second intake period for Phase One of the Circular Food Innovators Fund, for which the initial intake period was adopted by Council as a part of 2023.IE9.3 (November 15, 2023), by Environment, Climate and Forestry, substantially in accordance with the *Updated Framework for Phase One of the City of Toronto's Circular Food Innovators Fund* in Attachment 4 to the report dated October 15, 2025 from the Executive Director, Environment, Climate and Forestry and the General Manager, Solid Waste Management Services.
- 5. City Council authorize the Executive Director, Environment, Climate and Forestry, or designate, until December 31, 2026, to execute and enter into agreements with successful recipients to receive funds, distributed under a second intake period for Phase One of the Circular Food Innovators Fund outlined in Attachment 4 to the report dated October 15, 2025 from the Executive Director, Environment, Climate and Forestry and the General Manager, Solid Waste Management Services, each with terms and conditions acceptable to the Executive Director, Environment, Climate and Forestry, or designate, and each in a form acceptable to the City Solicitor.

FINANCIAL IMPACT

The total funding requirement in 2026 to implement the Circular Economy Road Map is \$2.4 million, which consists of \$1.2 million in capital funding and approximately \$1.2

million in operating funding. It also includes four (4) temporary positions in Environment, Climate and Forestry (ECF). The operating costs are expected to increase to \$4.1 million in 2027, which includes two (2) new full time employees (FTEs) for Transportation Services and Parks and Recreation, and a further increase to \$5.1 million in 2028. These operating funds will support program delivery, coordination and stakeholder engagement efforts.

Table 1: Funding Summary for the Circular Economy Road Map

| | 2026 | 2027 | 2028 |
|-----------|-----------|-----------|-----------|
| Capital | 1,219,000 | - | 1 |
| Operating | 1,183,872 | 4,050,235 | 5,060,062 |
| Total | 2,404,898 | 4,050,235 | 5,060,062 |
| New FTE | 4 | 2 | - |

Funding of \$2.4 million for Year 1 (2026) implementation has been included in the 2026 Operating and Capital Budget submissions for Solid Waste Management Services, and funding for future years (2027 and beyond) will be included in the 2027 and future divisional Operating Budget submissions for ECF, Transportation Services and Parks and Recreation for consideration through future budget processes.

This report also recommends issuing a new round of grants through the Circular Food Innovators Fund (CFIF) supported by \$250,000 in 2026 through the adopted 2025-2034 Capital Budget and Plan for Solid Waste Management Services. One-time funding in 2026 of \$25,000 towards CFIF has been included in the 2026 Operating Budget Submission for Economic Development and Culture.

The Circular Economy Road Map is a City-wide initiative involving multiple Divisions. Any incremental funding and resource requirements will be requested through future staff reports to Council, and/or in subsequent budget processes for consideration along with all other City priorities.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the information as presented in the Financial Impact Section.

EQUITY IMPACT

The Circular Economy Road Map has been analyzed for potential impacts on Indigenous, Black and equity-deserving groups of Toronto, including immigrants, refugees, and undocumented individuals, persons with low income, persons with disabilities, racialized groups, seniors, 2SLGBTQ+, women, and youth. Given its city-wide approach, the Road Map will impact all residents, and as such, has been developed with equitable access in mind. The process to develop the Road Map included multiple touchpoints with residents and organizations to help identify barriers to

circularity, community needs, and the values and priorities that the City ought to address in its future circular project and program design.

Toronto's transition to a circular economy has the potential for positive impacts that address all three domains of sustainable development: economic prosperity, ecological integrity and social well-being. Transitioning to a circular economy can also help mitigate the harmful impacts of climate change on Toronto, which disproportionately affect the most vulnerable communities. At the same time, it must be acknowledged that adopting new technologies, incentivizing innovative business approaches and undertaking systems changes can also have the risk of creating upfront increased costs and an uneven distribution of benefits.

The Road Map will be implemented through a whole-of-City approach, which will enable appropriate subject-matter experts in equity and inclusion from across City Divisions to help inform Environment, Climate and Forestry's approach to implementation. As a 10-year strategy, the implementation of the Road Map will result in different projects and programs which will each require their own equity impact analyzes and measurement of impacts. The design and development of these different projects and programs are opportunities for embedding equity into Toronto's economic growth, and as such will require evidence-based decisions, as well as targeted and flexible responses to accommodate differences and the changing needs of diverse communities. The Road Map also recognizes that circular economy principles are values that have been practiced by Indigenous people since time immemorial, and commits to using these initiatives to support reconciliation. The City will achieve this by building reciprocal relationships with Indigenous communities to collaborate on circularity initiatives that honour their leadership, traditions and cultural heritage.

Circular Food Innovators Fund

The second intake period of CFIF will provide funding to businesses in Toronto to support the implementation of reuse systems and elimination of single-use and takeaway items. Toronto's business community includes owners and operators from Indigenous and equity-deserving groups. In the first intake period for Phase One of CFIF, six of the nine grant recipients self-reported as a business owned or operated by one or more underrepresented groups, including youth, women, visible minorities, persons with disabilities, newcomers to Canada, and 2SLGBTQ+. The second intake period for CFIF may therefore continue to benefit members of equity-deserving groups who own or operate an eligible business.

Staff will continue efforts to ensure eligible Indigenous, Black, and equity-deserving applicants have fair and equitable access to be awarded CFIF funding through widespread, targeted, and accessible communications tactics. The evaluation process will also give consideration to projects that are submitted by eligible businesses comprised of owners and operators from Indigenous, Black, and equity-deserving groups.

DECISION HISTORY

At its meeting on September 19, 2025, General Government Committee adopted Item 2025.GG24.17 entitled "Environmentally Responsible Procurement Update" which provided an update on ongoing work by Purchasing & Materials Management Division to align the City's procurement policies with the TransformTO Net Zero Strategy, including ongoing collaboration with Environment, Climate and Forestry on circular procurement.

Agenda Item History - 2025.GG24.17

At its meeting on July 23 and 24, 2025, City Council adopted item EX25.6 entitled "Mayor's Economic Action Plan in Response to United States Tariffs - Update to Council" which included information on how the Circular Procurement Framework supports the proposed actions in the Mayor's Economic Action Plan.

Agenda Item History - 2025.EX25.6

At its meeting on November 13 and 14, 2024, City Council adopted Item EC16.2 entitled "Sidewalks to Skylines: An Action Plan for Toronto's Economy (2025-2035)" which included direction to implement targeted workforce development initiatives to support scaling of key high growth sectors in Toronto. This direction supports the addition of a new green workforce development add-on funding as part of the second intake period of the Circular Food Innovators Fund.

Agenda Item History - 2024.EC16.2

At its meeting on June 26 and 27, 2024 City Council adopted Item 2024.IE14.7 entitled "Circular Economy Road Map Strategy and Implementation Plan Development Update," which provided an update on interdivisional efforts to develop a Circular Economy Road Map, and the transition of the City's circular economy program to Environment, Climate and Forestry. The report authorized Solid Waste Management Services and Environment, Climate and Forestry to share the authorities previously granted by City Council in 2021.IE22.8 and 2023.IE9.3 and allowed either Division Head to separately enter into agreements to support the work of the City of Toronto's Circular Economy and Innovation unit.

Agenda Item History - 2024.IE14.7

At its meeting on May 22 and 23, 2024, City Council adopted Item 2024.GG12.18 entitled "Procurement Policy Updates Resulting from Amendments to Toronto Municipal Code, Chapter 195, Procurement", which directed the Chief Procurement Officer to report back in the first quarter of 2025 with an update on the alignment of the City's procurement policies with TransformTO.

Agenda Item History - 2024.GG12.18

At its meeting on December 13, 14, and 15, 2023, City Council adopted Item IE9.3 entitled "Update and Action Plan on the Single-Use and Takeaway Items Reduction Strategy, including the Circular Food Innovators Fund," which authorized Solid Waste Management Services to implement Phase One of the Circular Food Innovators Fund, including executing agreements to distribute grant funds to successful recipients.

Agenda Item History - 2023.IE9.3

At its meeting on June 14 and 15, 2023, City Council adopted Item IE4.1 entitled "Long-Term Residual Waste Management Options for the City of Toronto" and directed Solid Waste Management Services to provide an interim report, through the Infrastructure and Environment Committee, no later than June 2024, with a final report to be provided by June 2025, with a strategy and policy framework for the circular economy transition consistent with TransformTO and the City's carbon budget carbon accountability mechanism.

Agenda Item History - 2023.IE4.1

At its meeting on May 10,11 and 12, 2023, City Council adopted Item EC3.10 entitled "Review and Renewal of the Green Market Acceleration Program (GMAP)" which extended a revised GMAP until March 31, 2027, including providing authority to City Divisions to allow Toronto's green sector businesses to access to the City's infrastructure in order to conduct applied research, proof of concept trials, and demonstrations on green pre-market technologies, and providing the authority to City Divisions to enter into agreements with these businesses, whose projects have been approved, in order for them to participate in GMAP.

Agenda Item History - 2023.EC3.10

At its meeting on December 15, 2021, City Council adopted Item IE26.16 entitled "TransformTO - Critical Steps for Net Zero by 2040", which identifies actions for implementation to support sustainable consumption and identify pathways to circularity across the City and economy. By adopting Recommendation 1 - Net Zero Short Term Implementation Plan 2022-2025, Council directed Solid Waste Management Services, with involvement and leadership from other City Divisions, to develop a City-wide governance structure, strategy and policy framework for the circular economy.

Agenda Item History - 2021.IE26.16

At its meeting on June 8 and 9, 2021, City Council adopted item IE22.6 entitled "Single-Use and Takeaway Items Reduction Strategy – Stage 1" which included City Council direction to implement a Single-Use and Takeaway Item Voluntary Measures Program and directed the General Manager, Solid Waste Management Services, to report back in the first quarter of 2022 with an update and action plan on the Reduction Strategy, including a report back in the first quarter of 2022 on a review of options to incentivize businesses to reduce single-use and takeaway items such as partnership opportunities, financial incentives and grant programs, as a part of an update and action plan on the Single-Use and Takeaway Item Reduction Strategy.

Agenda Item History - 2021.IE22.6

At its meeting on June 8, 2021, City Council adopted Item IE22.8 entitled "Partnership Authority to Support Toronto's Circular Economy Outcomes" articulating a set of preliminary desired circular economy goals, vision, and outcomes for the City, which are meant to be further refined as part of the Circular Economy Road Map project's consultation process with interested parties across business, industry, and the general public.

Agenda Item History - 2021.IE22.8

At its meeting on November 18, 2019, General Government and Licensing Committee received Item 2019.GL9.10 entitled "Update on the Circular Procurement Implementation Plan and Framework" from the General Manager, Solid Waste Management Services, and the Controller for information, which provided an update on the implementation of Circular Procurement Pilots.

Agenda Item History - 2019.GL9.10

At its meeting on June 5, 2018, Government Management Committee received Item GM28.29 entitled "Implementation Plan and Framework for Integrating Circular Economy Approaches into City Procurement Processes to Support Waste Reduction and Diversion" from the General Manager, Solid Waste Management Services and the Treasurer, for information, which presents a Circular Procurement Framework that can be applied within the City's purchasing process to drive waste reduction, economic growth and social prosperity.

Agenda Item History - 2018.GM28.29

At its meeting on July 12, 13, 14, and 15 2016, City Council adopted Item PW14.2, entitled "Final Long Term Waste Management Strategy," endorsing the aspirational goals of zero waste and a circular economy and requesting the City Manager to form a cross-divisional Circular Economy Working Group, including Solid Waste Management Services, Environment and Energy (now Environment, Climate and Forestry), Toronto Water, Purchasing & Materials Management Division and Facilities Management (now Corporate Real Estate Management), among others, to develop a strategy and policy framework to make the City of Toronto the first municipality in the province with a Circular Economy and align with the goals of the Waste Free Ontario Act (2016). Agenda Item History - 2016.PW14.2

COMMENTS

The Circular Economy Opportunity

The City of Toronto has a longstanding history of leadership in waste management. As an early adopter of progressive waste diversion programs, the City implemented the Blue Box recycling program in 1988, followed by the introduction of the Green Bin organics program in 2002. More recently, in 2023, Toronto was among the first municipalities in Ontario to transition to the new Extended Producer Responsibility system for the management of Blue Box materials. As a result, Toronto has one of the most comprehensive integrated waste management systems in North America. Collectively, these programs have contributed to the City's ability to divert more than 50 per cent of residential waste from landfill each year.

While this system has been effective for the single-family residential sector, it has not serviced the majority of industrial, commercial and institutional (IC&I) sector and many multi-residential buildings. As Canada's largest city, Toronto is a significant consumer of materials and goods, and it is estimated that at least 50 per cent of the over 2 million

tonnes of waste generated in Toronto annually goes to landfills.⁵ This amount is expected to increase by nearly 20 per cent by 2030 from 2019 levels if no additional waste reduction measures are implemented, based on anticipated GDP and population growth projections.⁶ Simultaneously, the City's primary waste disposal site, Green Lane Landfill, is projected to reach capacity around 2035, and landfill availability across Ontario is expected to become increasingly constrained over the next decade.

While the City continues to plan for the management of residual waste through the 2023 Residual Waste Management Work Plan, the most effective long-term solution is to reduce the amount of waste generated. Consuming more sustainably requires a shift toward new models of design, production and consumption that reduce the amount of extraction needed for new materials, prevent waste, and keep materials in use for as long as possible through processes like redesign, reduction, reuse, repair, refurbishment, remanufacturing, repurposing, recycling and recovery. This approach is commonly referred to as the circular economy.

A circular economy goes well beyond traditional recycling or waste collection. It emphasizes the innovative design of products, buildings and cities to minimize waste from the outset, while promoting material efficiency, regenerative practices and sustainable consumption. By keeping materials in use for longer and increasing the demand for reused and recycled materials, a circular economy also helps reduce greenhouse gas emissions and other adverse environmental impacts associated with natural resource extraction. In doing so, it strengthens the resilience of natural ecosystems, while also reducing pressure on landfills, addressing climate change and supporting more sustainable patterns of growth.

A circular economy also delivers significant economic and social benefits. By keeping resources in circulation for longer, residents and businesses have greater ability to use existing resources rather than spending more, supporting affordability. Circular strategies can foster local innovation by encouraging businesses to develop circular practices and develop new circular products, services and business models, particularly when the strategies are designed to eliminate barriers and create enabling conditions for business innovation. Increased circularity can strengthen economic resilience by reducing dependence on global supply chains, namely through the presence of local innovation, secondary markets and resource recovery pathways that increase material security and reduce exposure to price volatility. These shifts support local production, create new economic opportunities and jobs and contribute to a stronger and more sustainable economy that is better positioned for long-term prosperity in a period of global uncertainty and economic renewal.

⁵ City of Toronto. (2021, July). Baselining for a Circular Toronto: Final Report: Technical Memorandum #3. https://www.toronto.ca/wp-content/uploads/2021/09/90e4-Technical-Memorandum-3Final-Report-09.09.2021FinalAODA.pdf

⁶ City of Toronto. (2021, May). Baselining for a Circular Toronto: Material Flow Analysis: Technical Memorandum #2. https://www.toronto.ca/wp-content/uploads/2021/06/96b8-technical-memorandum-2-material-flow-analysis.pdf

⁷ World Economic Forum. (2022, May 17). The circular economy: how it can lead us on a path to real change. https://www.weforum.org/agenda/2022/05/the-circular-economy-how-it-can-be-a-path-to-real-change/

The circular economy also offers an opportunity to support reconciliation. The circular economy is a pathway to preserve lands and waters, restore the health of ecosystems and create regenerative systems for all living things; the City acknowledges that these are values that have been practiced by Indigenous Peoples since time immemorial. The City recognizes that circularity is not a new or Western concept. As such, circularity is not only about adopting new practices; it also involves acknowledging the importance of ancestral knowledge and Indigenous values and securing the ability for Indigenous Peoples to practice traditions and conserve cultural heritage. Across all five Strategic Directions of the Road Map, there is an opportunity to use circular initiatives to support reconciliation. Through the Road Map, the City commits to a reciprocal relationship-building with Indigenous Peoples and communities to identify appropriate paths for collaboration on circularity initiatives.

Circular practices are not new to many communities, and there are many Torontonians who are passionate about the circular economy transition. Opportunity exists to understand these communities and their practices, particularly those who are vulnerable or marginalized, to inform and inspire the City's work.

In light of current challenges and opportunities, the City is advancing its transition to a circular economy through the creation of its first 10-year Circular Economy Road Map. The Road Map identifies solutions for waste reduction and sustainable consumption in Toronto beyond traditional waste operations to address broader consumption behaviours that generate waste. Over the course of its implementation, the Road Map will deliver lasting benefits for residents, businesses and the City.

The City of Toronto's transition to a circular economy

This Road Map represents a key milestone in a journey that began when Toronto City Council adopted the <u>Long-Term Waste Management Strategy</u> in 2016. Council set an aspirational goal to work towards zero waste and a circular economy, and to make Toronto the first municipality in the province of Ontario with a circular economy. This goal has been reinforced in key City strategies, including the <u>Corporate Strategic Plan</u>, the <u>TransformTO Net Zero Strategy</u> and the <u>Resilience Strategy</u>.

Since 2016, the City has pursued a circular economy work plan, initiated by Solid Waste Management Services. The work plan sought to take advantage of immediate opportunities for circularity while building the evidence base and perspective required to define a strategic direction for Toronto's circular economy transition, commensurate with Toronto's ambitions and position as a global leader on municipal sustainability efforts. Key City accomplishments in advancing the circular economy to date include:

- Creating closed loops in City waste infrastructure by turning <u>organic waste into</u> <u>renewable natural gas</u> (2021) that can power waste collection vehicles and City facilities.
- Establishing the <u>Community Reduce and Reuse Programs</u> (2018) primarily in Neighbourhood Improvement Areas to build a culture of waste reduction, reuse, sharing and repairing.
- Developing a <u>Circular Procurement Implementation Plan and Framework</u> (2018) to guide the City in applying circular principles to its purchasing decisions and encourage circular innovation; and further launching an Environmentally

- Responsible Procurement Governance Table (2025) to improve collaboration on initiatives that promote sustainable procurement choices.
- Convening a <u>Circular Economy Working Group</u> (2019-2020) comprising local businesses, academics, non-profits, environmental groups and other community stakeholders to provide input on the City's early circular economy work.
- Completing a milestone study of Toronto's state of circularity called the <u>Baselining</u> for a <u>Circular Toronto</u> (2021) to identify priority sectors and develop a vision for a <u>Circular Toronto</u>.
- Piloting the <u>Circular Food Innovators Fund</u> (2024) to help small businesses eliminate single-use and takeaway items and adopt reuse systems.
- Participating in several <u>national and international working groups and initiatives</u> to advance national and global circular economy knowledge sharing.

Through this work, it became clear that transitioning to a circular economy requires a whole-of-city approach that extends beyond the scope of programs delivered by Solid Waste Management Services. Recognizing that all City Divisions influence waste generation in Toronto, the TransformTO Net Zero Strategy directed the creation of a City-wide governance framework for Toronto's Circular Economy Road Map. Fifteen City Divisions⁸ were convened to provide oversight and interdisciplinary perspectives on the Road Map, and to address the operational and community-wide implications of transitioning Toronto to a more circular economy. The need for programmatic integration with the City's wider environment and climate action goals resulted in the circular economy program being transferred from Solid Waste Management Services to the Environment, Climate and Forestry in 2024.

As an early adopter of circular economy principles, the City of Toronto has been recognized regionally, nationally and internationally for its efforts to advance waste reduction and resource efficiency. The Road Map builds on this work and investment by advancing progress and strengthening Toronto's leadership profile, positioning the City among the global peer cities that are advancing the transition to a circular economy.

Circular Economy Road Map Project Overview

The Road Map (Attachment 1) sets out the City's goals, outlines strategic directions and presents actions for the City, which include developing new or improved projects, programs and processes to support Toronto's circular economy transition. The 3-year Implementation Plan (Attachment 2) presents the planned activities and the role of City Divisions.

The Road Map project consisted of four phases, which are published on the <u>City's website</u>. The phases included goal setting, issues and opportunity identification, options analysis (with a jurisdictional scan of more than 100 global municipalities to help identify actions to be included in the Road Map), and the development of the Road Map and implementation plan.

⁸ The 15 Co-Creating Divisions of the Circular Economy Road Map are: Environment, Climate and Forestry; Solid Waste Management Services; Accounting Services; City Planning; Corporate Real Estate Management; Economic Development and Culture; Engineering & Construction Services; Housing Secretariat; Indigenous Affairs Office; Parks and Recreation; Purchasing & Materials Management Division; Social Development; Toronto Building; Toronto Water; and Transportation Services.

The Road Map was informed by engagement, with input sought from residents, Indigenous organizations and industry representatives to ensure it reflects Toronto's unique context and priorities, as well as learnings from peer cities that are implementing circular economy strategies. The estimated investment for the Road Map is consistent with what other peer cities of similar size and ambition are committing to their own circular transitions. A summary of these findings is presented in Attachment 3.

Circular Economy Road Map and 3-Year Implementation Plan The Circular Economy Road Map

The Circular Economy Road Map sets out a vision for Toronto's circular economy transition over the next 10 years. Efforts to implement the Road Map, including the design of new projects and programs, will be informed by six guiding principles that were developed through engagement with Toronto communities: systems thinking, environmental stewardship, value creation, culture and capacity, equity and inclusion and accountability.

The Road Map is organized around five Strategic Directions and 15 Actions that provide the framework for implementation, with brief details below. Additional information on the guiding principles, strategic directions and actions can be found in Attachment 1.

Strategic Direction #1: Invite everyone to participate in Toronto's transition to a circular economy

A successful transition to a circular economy will require widespread changes in how individuals, businesses and institutions approach consumption, use of materials and day-to-day decision making. To support this shift, the City will support residents, businesses and City staff to understand the need, benefits and opportunities to participate in a circular economy. This will involve targeted communications and education initiatives to reach residents and businesses, the expansion of recognition programs to showcase circular leaders and strengthening the capacity of City staff to integrate circular approaches into municipal programs and operations. These efforts will enhance awareness and engagement, supporting the circular economy in becoming a recognized and shared priority.

Over the next three years, the City's actions will include communicating the benefits of a circular economy to Torontonians, celebrating Toronto's circular business leaders, and empowering City staff to advance circularity.

Strategic Direction #2: Accelerate the growth of circular businesses in Toronto

A successful circular economy will require businesses to adopt new approaches to how goods and services are designed, produced and delivered. To support this shift, the City will work with key sectors such as construction, food systems, and waste diversion and materials recovery to improve circular practices and address barriers that limit adoption. This will involve collaborating with industry to identify challenges, removing financial obstacles, leveraging City assets, assessing potential policy barriers and creating stronger connections between businesses. These efforts recognize that enabling and

accelerating business leadership is essential to advancing circularity, strengthening local competitiveness and positioning Toronto as a hub for innovation.

Over the next three years, the City's actions will include improving the state of circularity across priority sectors, identifying and taking steps to mitigate municipal barriers to the circular economy and exploring new opportunities to incentivize circular practices.

Strategic Direction #3: Demonstrate the benefits of circularity through City operations

As one of the largest property owners and purchasers of goods and services in Canada, the City has a unique opportunity to lead by example in advancing a circular economy. By embedding circular practices into its own operations, the City will demonstrate how these approaches can be practically applied while generating value for residents and businesses. This will include integrating circularity into procurement, planning and infrastructure projects, as well as reviewing policies and processes to ensure they support reuse, repair and resource recovery. Taking this leadership role will showcase the feasibility and benefits of circular approaches and reinforce the City's responsibility to model practices that can be scaled across Toronto.

Over the next three years, the City's actions will include further integrating circularity into City purchasing, facilitating circular practices and investments in City planning, construction and infrastructure and embedding circular principles in City policies, processes and services.

Strategic Direction #4: Advance circular opportunities in every neighbourhood in Toronto

Ensuring that circular opportunities are available in every part of the city is critical to making the transition inclusive and accessible. The City will expand access to programs and services at the neighbourhood level, while also supporting local economic development through skills training, community-based initiatives and collaboration with organizations that can deliver circular localized solutions close to where residents live and work. These efforts will help create equitable opportunities for participation, foster new pathways for employment and entrepreneurship and ensure that the benefits of circularity strengthen both communities and the local economy.

Over the next three years, the City's actions will include enabling community-based circular jobs and skill building, using collaboration with organizations to enhance access to the circular economy and working to establish circular opportunities for residents in all 25 wards.

Strategic Direction #5: Collaborate with other levels of government to accelerate circularity

Many of the enabling factors required to advance a circular economy extend beyond the City's direct authority. Coordinated efforts with federal, provincial, regional and international governments are essential, as their policies, regulations and investments shape the systems of production and consumption that drive the economy. The City will

work with other governments to pursue aligned approaches, advocate for supportive policy frameworks and identify opportunities for joint initiatives that accelerate circular practices. Strengthening collaboration across jurisdictions will help Toronto scale local efforts, attract resources and ensure that circularity is advanced consistently across the wider economy.

Over the next three years, the City's actions will include championing circularity at the federal and provincial levels, collaborating on regional circular solutions and learning from global best practices. Implementation in later years will prioritize scaling and accelerating the transition

Implementing the Road Map

The Road Map is supported by an Implementation Plan for Years 1 to 3 that guides staff action and informs resourcing requirements (Attachment 2). During the first three years, the City's focus will be on establishing the groundwork for the circular economy transition, as well as a framework to measure and report on progress. A dedicated implementation team in Environment, Climate and Forestry will coordinate the delivery of the Road Map and serve as the City's centre of excellence. For interdivisional governance and senior leadership oversight, existing bodies such as the Net Zero Climate Leadership Table will be leveraged. Project-specific governance mechanisms may also be established on a case-by-case basis to meet the specific needs of individual projects or initiatives.

Staff have identified the following key initiatives to prioritize beginning in 2026:

Initiative #1: Education campaigns for consumers and business innovators (Strategic Direction 1, Action 1.1 and 1.2, Sub-Actions 1.1.1, 1.1.2, 1.2.3, 1.2.4)

Engagement with Toronto residents, local businesses and global cities identified that low awareness of circular solutions is a key barrier to the success of circular economy initiatives. To address this, the City will establish:

- A public communication and awareness campaign that builds a shared understanding of circular principles, solutions and opportunities to participate, and will also include identifying and celebrating circular businesses in Toronto in a fair and transparent manner.
- An inventory of existing City communications on circular economy and waste reduction, a gap analysis, and the identification of target audiences, key messages and spokespeople in order to enhance existing and propose new communications campaigns and tactics.

The success of these campaigns will be assessed by measuring resident awareness levels over time and the number of circular businesses showcased.

Initiative #2: Establish industry forums to build relationships with circular businesses (Strategic Direction 2, Action 2.1, Sub-Action 2.1.1)

Engagement with local businesses highlighted that collaboration between industry and the City is essential to ensure that the City's circular initiatives are feasible, and to create new opportunities for businesses to share knowledge and collaborate. As such, the City will:

- Establish formal communication channels with businesses through dedicated industry forums. These forums will be a platform for sharing insights, identifying barriers and co-developing potential solutions.
- Create an approach to identify and invite businesses to join industry forums, developing the Terms of Reference, curating outcome-oriented agendas and identifying pathways to take action on feedback received from the forums.

Success will be measured by the number and diversity of businesses engaged through these forums, and the extent to which barriers and opportunities are identified and addressed through collaboration.

Initiative #3: Identify City assets and resources to support circular initiatives (Strategic Directions 2 and 4, Action 2.1, 2.3, 4.3, Sub-Actions 2.1.4, 2.3.1, 4.3.3)

Residents, community organizations and businesses all strongly recommended that the City should take stock of the assets and resources it already controls and determine how those can be better used to support the circular transition. A comprehensive inventory and analysis of City-owned assets and resources will be developed to enable:

- A review of the City's real estate and asset portfolios for opportunities to extend asset lifespans and enable greater sharing or repurposing across Divisions.
- Identification of community-facing City-owned properties and facilities that might be capable of hosting neighbourhood-level circular programming.
- Identification of opportunities to make suitable City assets available to support business-led initiatives, such as material reuse hubs.

Success will be measured by the completion of a comprehensive inventory of the City's assets and resources and the identification of various opportunities for leveraging these to support both community, businesses and the City's circular initiatives.

Initiative #4: Expand community-led circular economy programs (Strategic Direction 4, Action 4.2 and 4.3, Sub-Action 4.2.1 and 4.3.1)

Engagement with residents and community organizations revealed a strong desire for expanding community-focused circular activities, such as repair cafes, community kitchens and Do-It-Yourself workshops. As such, the City will:

- Explore opportunities to strengthen relationships with organizations the City currently works with and identify new programs to support.
- Conduct an access and equity analysis of existing circular community programs.
- Conduct a gap and needs assessment, identifying potential stakeholders to work.

Success will be measured by the number of new programs and the growth of resident participation in community programs.

Initiative #5: Leverage City-owned infrastructure to accelerate circular business innovation through the Green Market Acceleration Program (Strategic Direction 2, Action 2.3, Sub-Action 2.3.1)

Public and industry engagement through the Circular Economy Road Map identified a strong desire for the City to help businesses adopt circular practices and establish Toronto as a testing ground for circular business innovation. The City's experience has shown that the Toronto market is ready to accelerate the development and commercialization of made-in-Toronto green technologies. For example, through the 2021 global Circular Innovation City Challenge (CICC), the City of Toronto and other participating global cities received 137 circular innovation proposals from 26 countries. Canadian innovations represented 30% of all applications, with 16% of all proposals received coming from Toronto-based applicants. The CICC also resulted in a collaboration between the City and University of Toronto's Rotman School of Management on a student pitch competition that challenged over 150 emerging business leaders to explore circular innovations and business models.

The City's Green Market Acceleration Program (GMAP) supports the development and commercialization of green technologies by providing companies with controlled access to City-owned infrastructure and assets. Environment, Climate and Forestry will work with Economic Development and Culture to:

- Increase awareness of GMAP among circular innovators, including through communications targeted to local green tech, circular startups and incubators.
- Facilitate Divisional participation in GMAP by helping to identify and assess the suitability and availability of City infrastructure and assets.
- Showcase successful GMAP projects.

Lessons learned from this initiative will inform whether City staff will further suggest enhancements to GMAP or additional innovation programs that could further foster the growth of circular businesses in Toronto.

Initiative #6: Assess the feasibility of a reuse hub for construction materials (Strategic Direction 2, Action 2.1, Sub-Action 2.1.4)

Toronto's construction sector sends a significant amount of construction and demolition waste to landfills. Despite the potential for reuse of these materials, barriers such as insufficient space for material storage, fragmented reuse networks, and a lack of coordination between project planning and deconstruction limit the supply and demand for secondary materials. Engagement with the construction sector through the Road Map project highlighted a clear need for stronger systems to support material reuse, including better storage facilities, logistics and market access for salvaged materials.

Material reuse hubs offer a practical and scalable solution to addressing the barriers limiting the supply and demand for secondary materials in Toronto's construction sector. These material reuse hubs can function as centralized facilities that enable the collection, sorting, storage, and redistribution of reusable construction materials, helping to reduce waste, support green job creation and enable more low-carbon construction.

Embodied carbon has become a key area of focus in mitigating climate change. The use of secondary materials, such as salvaged construction materials, surplus building supplies and deconstructed building elements, can significantly lower embodied emissions because they bypass carbon-intensive steps such as mining, manufacturing and transportation that new construction materials require. A centralized facility could also support the innovative development of new materials and products made from construction materials that cannot be salvaged for reuse, enabling increased recycling and diversion of construction and demolition waste while also supporting innovators and entrepreneurs.

As a starting point, the City will conduct a feasibility study to assess the utility and viability of establishing a material reuse hub in the Port Lands. The Port Lands are undergoing significant redevelopment and will generate large volumes of construction and demolition waste, making it an ideal location to explore the utility and viability of a material reuse hub. Salvaged construction materials, surplus building supplies and deconstructed building elements could be used in current and future phases of new development in the Port Lands and could enable the City's ongoing efforts to implement deconstruction in City-owned projects. For example, in 2024, the City started its first deconstruction pilot for an affordable housing project and is exploring more opportunities to continue deconstruction efforts. To assess the utility and viability of a material reuse hub, the feasibility study may examine space requirements, stakeholder roles, governance models, legal concerns, collaboration opportunities and capital investment needs specific to the Port Lands area. Insights from the study may also help inform additional opportunities to expand material reuse infrastructure beyond the Port Lands, in support of the City's circular economy and net-zero goals.

Initiative #7: Sustain and expand the Circular Food Innovators Fund (Strategic Direction 2, Action 2.3, Sub-Action 2.3.2)

In 2024, Phase One of the Circular Food Innovators Fund (CFIF) was launched in response to City Council's direction to advise on options to incentivize businesses to reduce single-use and takeaway items. CFIF was designed to support market-ready business solutions that help to achieve a more circular food system for Toronto residents and businesses, starting with reuse systems solutions that eliminate packaging waste. Over the past year, CFIF has provided \$262,500 worth of grants to nine small businesses in Toronto, including three local reuse infrastructure providers. The first round of CFIF funding delivered strong outcomes and high value returns from a relatively small City investment, including business growth, job creation, operational efficiency and waste reduction for participating businesses. The 2024 intake received over 40 complete applications despite having been advertised for only one and a half months, indicating a clear market readiness to adopt reuse systems.

When Phase One was proposed to Council, staff had only contemplated issuing one round of funding for reuse projects prior to bringing forward recommendations on how the program could be expanded in Phase Two to support other kinds of circular food solutions. However, based on interim and final reports from grant recipients, as well as business interest received since the program launched, staff have identified value in offering another round of funding for reuse projects to address high demand and build on existing momentum.

To align with broader City priorities, the second round of CFIF grants will also include targeted funding for up to five projects to receive an additional \$5,000 to deliver targeted workforce development activities in areas relevant to the reuse system and circular food economy focus of CFIF. Projects submitted for the green workforce development addon funding must align with CFIF goals and contribute to building workforce capacity in Toronto's green economy. This financial contribution from the Economic, Development and Culture Division will be offered as a one-time pilot to test how small-scale, targeted workforce interventions can help food service businesses train staff to successfully transition to reuse systems and develop the skills, knowledge and qualifications of their employees through activities that can be scaled across the sector. It will also help to understand how targeted workforce development activities within the circular food system can support Action 59 of Economic, Development and Culture Division's report "Sidewalks to Skylines: A 10-Year Action Plan for Toronto's Economy (2025-2035)." Findings will inform future program design and provide evidence on the role of workforce development in advancing Toronto's green and circular economies.

The second intake of applicants to CFIF will be administered by Environment, Climate and Forestry staff. Attachment 4 outlines the updated framework for a second intake period of Phase One of CFIF. Pending Council approval, staff intend to launch a second intake period for CFIF in Q1 2026, with funded projects concluding by the end of 2027. Staff will continue to advance the design of Phase Two of CFIF, considering how to expand the program to support business innovation at different stages of the food value chain, and will also explore opportunities to establish CFIF as an annual initiative. Staff will present a report back to Council that includes recommendations for the CFIF program's long-term framework and administration.

Next Steps

This Road Map will be delivered using a whole-of-City approach. Environment, Climate and Forestry will lead the implementation of the Road Map as the strategy owner and manager, working in collaboration with participating business units and City Divisions. Staff will provide regular progress updates to City Council on the implementation of the Circular Economy Road Map. The first update will be delivered in 2029, following the initial three years of implementation (2026–2028). Based on timing considerations, staff will also report back to City Council on the implementation of Phase One of the Circular Food Innovators Fund (CFIF), and with recommendations for the CFIF program's long-term framework and administration as part of Phase Two of CFIF. In this report, staff will include information on both the first and second intake periods for Phase One of CFIF.

The City acknowledges and appreciates the time, knowledge, and lived experience contributed by participants throughout the development of the Road Map. As implementation proceeds, the City remains committed to fostering strong relationships and sustaining open dialogue with all interested parties, recognizing that advancing a circular economy requires collective effort and ongoing collaboration.

⁹ The food value chain refers to all the stages involved in the creation and movement of food and beverage products from farm to the consumer. The food value chain includes food production, processing and manufacturing, distribution, food retail (sale), and food service (preparation of meals outside the home). Achieving a circular food system requires action at each step along the food value chain.

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ATTACHMENTS

Attachment 1 - Circular Economy Road Map

Attachment 2 - 3-Year Circular Economy Road Map Implementation Plan

Attachment 3 - Circular Economy Road Map Project Overview

Attachment 4 - Updated Framework for Phase One of the City of Toronto's Circular Food Innovators Fund