FOOD WASTE AND INSECURITY REPORT: A YOUTH PERSPECTIVE



Presented by the City of Edmonton Youth Council



What Does **That** Mean?

Food Jus-tice

Working towards food justice means building a food system that respects food and people's right to access nutritious, affordable, and accessible food. It addresses structural inequities within our food system and focuses on topics such as food security, community relations, and sustainability.

Food Waste

Food that is lost or wasted due to cosmetic defects, spoilage, excess, etc.

Food In-se-cu-ri-ty

The lack of "physical and economic access by all people at all times to meet their dietary needs and food preferences for an active, healthy life. Food [in]security includes at a minimum the [inability to readily access] nutritionally adequate and safe foods [...]; and an assured [in]ability to acquire foods in socially acceptable ways (e.g. resorting to emergency food supplies, scavenging, stealing, or other coping strategies).' (fresh-Edmonton's Food and Urban Agriculture Strategy, 2012)

Glean-ing

Extracting leftover or excess food. In this Report, gleaning is used to refer specifically to initiatives that redirect good food away from landfills and into homes.

Preface:

The City of Edmonton Youth Council (CEYC) is an advisory committee to Edmonton City Council. CEYC has prepared a recommendation–based information report that sheds a distinct youth take on food issues in Edmonton. In this report, we are focusing on two major food issues within our City: food waste and food insecurity.

Food waste imposes severe economic and environmental costs on our communities.

Food insecurity is a persistent and escalating problem¹ that uniquely affects various demographics, including youth.²

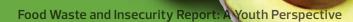
Food waste and food insecurity tend to overlap in our food systems. Often, **gleaning** or redirecting excess food to charities and/or food-insecure households is the solution of choice to mitigate these two issues. Our research initiative looks at multiple ways to address these issues within the context of achieving **food justice**. Furthermore, our suggestions aim to realize the outcomes of the Waste Reduction Roadmap '24 and the City Plan. Our recommendations promote positive impacts in the following areas:

- Increasing climate resilience
- Reducing the cost of food waste
- Addressing food insecurity
- Encouraging youth participation and awareness in food waste initiatives

To craft a Report that properly complements Edmonton's needs, we undertook the following steps:

- **1.** A study of existing initiatives in Edmonton that deal with food waste and/or insecurity
- Research on contemporary Canadian and European strategies and reports
- 3. Interviews with leaders within the food sphere both in Edmonton and around Canada

4. A survey of Edmontonian youth aged 13–23 years old on food waste and food insecurity



Our 8 recommendations, from A to H, support the following municipal objectives: From the *Edmonton City Plan*³



Greener as We Grow: "Achieve total community-wide carbon budget of 135 megatonnes; net per-person greenhouse gas emissions are zero"



A Community of Communities: "15-minute districts that allow people to easily complete their daily people."

From Edmonton's Waste Reduction Roadmap '24⁴



Action #4: "Ensure Edmontonians have easy access to waste reduction information and programs that deliver clear and consistent messaging"



Action #7: "Identify priority actions and how the City can reduce barriers to waste reduction for the [non-residential] sector"



Action #10: "Support NGOs that deliver waste reduction messaging and programming by sharing content and working together to identify priority topics"



Our Message:

The City of Edmonton Youth Council expects
Edmonton to build a culture of respect around food.
This involves recognizing and mitigating the effects
of food waste, while affirming people's right and
ability to obtain healthy and culturally relevant
food. We recognize that the ongoing efforts to
redirect excess food to charities have had a major
impact on the ability of communities to address
food insecurity and reduce food waste. However,
our research suggests that food insecurity has
not declined in Canada, despite this essential
work^{1, 5}. In addition, food leaders and community
organizations have shared concerns that gleaning
alone will not be enough to reduce food waste and
food insecurity.⁶

So, while CEYC supports gleaning efforts, we recognize that these are "band-aids" to a wound that is deeply rooted and intersected with various structural factors. Food insecurity and food waste are intrinsically tied to social issues such as poverty, climate, and homelessness. Thus, addressing the issues of food insecurity and food waste requires a multipronged approach that involves individuals, communities, and government alike. Heavily investing in one approach will not yield effective solutions or outcomes.

While awaiting provincial and federal solutions, CEYC implores Edmonton to continue to support initiatives that lead to affordable living and take a more active approach to food waste reduction. We also encourage the City to take a step for ward when it comes to addressing food issues, and pursue mitigation strategies that are more innovative, far-reaching, and equitable in their implementation. Relying on band-aid solutions is unsustainable in the long term. Rather, our City needs to create conditions that allow people to access food without needing to use charities or sacrifice their dignity, cultural roots, and nutrition.

This Report takes multiple approaches in achieving food justice, while sharing a holistic understanding of the root causes of food insecurity and food waste.



Why Talk About It?

Food Insecurity

The COVID-19 pandemic has exacerbated issues of food insecurity amongst Canadian and Edmontonian households.

- **Before the Pandemic (2017–2018)**
 - 1in 8 (12.5%) Canadian households were food insecure ⁷
 - 1 in 4 Canadian children (<18 y.o.) went to bed or school hungry.8
- Within Edmonton, 13.8% of residents were food insecure.9

During the Pandemic (2020–2021)

- 14.6% of Canadians experience household food insecurity. Households with children are 1.6 times more likely to be in this group.
- Multicultural Health Brokers, an organization that supports newcomers, underwent a four-fold increase in its clients for its food provision program. 54% of the 3300 Edmontonians served were under 18 years old.
- Food4Good, a community development organization, more than doubled the clients it serves through its food program on the west side.
- Edmonton Food Bank served 18% more clients in March 2020 compared to March 2019
- WECAN provides low-cost food baskets. 33% go to young families.

Food Waste

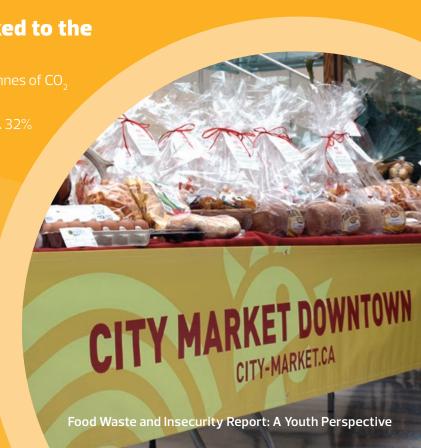
Food Waste is inextricably linked to the economy and sustainability.

Canada's food waste creates 56.5 million tonnes of CO₂
 equivalent emissions.¹¹

 58% of food is lost or wasted within Canada. 32% of this could be rescued and redistributed to food insecure Canadians.¹²

 Alberta is estimated to spend \$500 million on food waste disposal annually.¹³

- Including costs like irrigation, labour, and disposal, the total cost of food waste in Canada is over \$100 billion per annum.
- United Nations Sustainable
 Development Goal Target 12.3: By
 2030, halve per capita global food
 waste at the retail and consumer
 levels and reduce food losses along
 production and supply chains, including
 post-harvest losses. 15



Recommendations

1. The Milan Urban Food Policy Pact

The Milan Urban Food Policy Pact is an international agreement between City Mayors to "develop sustainable food systems that are inclusive, resilient, safe and diverse, that provide healthy and affordable food to all people in a human rights–based framework, that minimize waste and conserve biodiversity while adapting to and mitigating impacts of climate change." The framework consists of 37 recommendations, progress monitoring, and city–to–city cooperation. The pact has 211 signatory cities, including Vancouver, Montreal, and Toronto.

A. We recommend that the City of Edmonton joins The Milan Urban Food Policy Pact as a commitment to meaningfully work towards developing quality food systems and achieving food justice.

2. Commercial Food Waste and Opportunities

Twenty-five percent of unplanned and avoidable food waste happens in retail, hotels, restaurants, and institutions.¹⁷ Another 54% comes from manufacturing, processing, production, and distribution. To tackle commercial food waste, it is necessary to provide businesses with the right tools to examine and evaluate the consequences of their waste.

B. We recommend that the City of Edmonton pursue actions that educate and train businesses in donating/diverting excess to local organizations



As part of Edmonton's 25–year Waste Strategy, the city is reducing its commercial collection services. ¹⁸ This transition would force businesses to reexamine the cost, benefits, and consequences of their food waste. While some organizations already work to encourage the donation of food, generally, there are gaps in knowledge about donation opportunities and legal liabilities about unsafe food. Thus, it is crucial for the city to encourage businesses and the commercial sector to contribute to gleaning.

The City needs to ensure that this transition includes the provision of necessary resources and education for businesses to analyze the consequences of food waste.

While donation is an important diversion tactic, it is necessary for those involved to understand the nuances of donating food to community members. These include:

- Understanding cultural sensitivity in relation to food
- Having proper training to handle and label donations
- Understanding their exemption from legal liability by the Charitable Donation of Food Act.



C. We recommend that the City of Edmonton provides local businesses with resources and incentives to develop their individual food waste reduction plans

Advanced technology, such as Lean Path¹⁹ and Winnow Solutions,²⁰ effectively and efficiently track a business's food waste, and provide solutions using Al, scales, and apps. Large corporations, like Ikea, have incorporated these programs. Grants to purchase this technology should go to smaller businesses that may lack the awareness and financial ability to implement them.

Alternatively, we recommend the City adopt a strategy similar to the UK FoodSave project,

a resource for smaller businesses to reduce and divert food waste. Through this initiative, businesses can be supported in learning how to do their own commercial waste audits. A commercial



waste audit measures a business's food waste streams to discover where waste is coming from, the associated cost, and reduction strategies.

3. Schools

Youth represent a world of potential in ensuring change happens. However, their voices are still underrepresented in City discussions. Here, we zoom in on some recommendations involving youth in schools.

D. Student–led initiatives: Youth can become directly involved in their schools to reduce food waste, by cooperating with their cafeteria to make a compost bin, creating knowledge campaigns, conducting research, and more.

Whereas only 36% of respondents in our youth survey were taught about food waste primarily through school, 87% of respondents were in favour of engaging in food waste reduction activities in school. All respondents were in favour of some form of food waste programming within schools.

To motivate students to pursue such activities, we recommend that the City of Edmonton provide grants and similar incentives that encourage youth-led food waste initiatives.















F. As mentioned, businesses play a pivotal role in food waste reduction. As such, the commercial sector should be encouraged where possible to donate excess food and/or support food waste reduction initiatives. **We recommend that the City of Edmonton works with the Edmonton School Board of Trustees to determine the feasibility of building a pathway for food donation** between restaurants and schools, where businesses can support initiatives such as free breakfast programs for students, etc.



4. Diversifying Food Options

Food insecurity involves a combination of two issues: not having the disposable income to afford enough food, and not having the ability to acquire the necessary food for one's individual circumstances. Diversifying food options is a way of alleviating both of these issues. Here are the food options we would like to see more of in Edmonton:

Community Food Centres (CFC) combine the distribution of food with community involvement. Thirteen CFCs across Canada "grow, cook, share, and advocate for good food for all." They do better in maintaining the dignity of their clients (more so than traditional charities). Through food education services and a collection of programs, they build more resilient, more food secure communities.

Community Food Markets (CFM) are mini farmers' markets with a mandate to "improve access to fresh, affordable food." Vancouver hosts multiple CFMs in areas where residents have lowered accessibility, due to mobility issues or distance from supermarkets. Edmonton has 8 food deserts as of 2015. Regular farmers' markets may not resolve the issues of affordability and accessibility, because the targeted demographic is often not people experiencing food insecurity. Additionally, while farmers' markets and gardens support some food deserts in Edmonton, most are located nearby existing grocers. Finally, CFM's support the City Plan's "15-minute city" goals, but in a way that considers the needs of more Edmontonians by addressing affordable food access within deserts.

Community Fridges (CF) are fridges/pantries located in public areas and are free to be used by anyone. Community members place their excess food inside and/or take what they need for food relief. CFs offer more anonymity, dignity, and choice to users, compared to a traditional charity. They are booming in popularity across Europe, the U.S., and here as well. One Calgary Community Fridge was opened by 100 community members and emptied 5 times a day.²⁴ However, we recognize that CFs are temporary band-aids that may not address the root of food insecurity, and thus need supporting strategies with its implementation.

The fridge is a good conversation starter to help us put the community towards action to solve the problems, but it can only work if it's connected with other community action movements.

ERNST BERTONE-OEHNINGER,
 Co-founder of freedge.org,
 an American CF organization

G. We recommend that the City of Edmonton investigate the feasibility of supporting CFCs, CFMs, and CFs in Edmonton, while exploring supporting long-term strategies that further address the issues of food waste and food insecurity.

How to promote these food options:

- The City of Vancouver's website hosts **step-by-step instructions** on how to start a CFM. Initiatives support the community in supporting each other. Instructions like these can be used for CFCs and CFs, as well. Promotion of these initiatives on the City of Edmonton website would pose the added benefit of lessening concerns from critics of CFs who are worried about safe food handling and reliability.
- **Reducing challenges associated with licensing:** Vancouver helped streamline the CFM application process by establishing them as a permitted use and charging only \$10 for their business licenses.
- Ensuring awareness of food options: the City of Vancouver's website offers a map of free and low-cost food resources. A municipal map like this helps people with varying levels of food insecurity explore their options and provides a platform for smaller food initiatives.





5. Community Organizations

Edmonton is home to several well-established charities and nonprofits with experienced workers, some of whom have dedicated decades to their advocacy for food security. Unsurprisingly, these workers are personally fulfilled by the work they do and showed tremendous passion throughout our interviews in the discussed issues and the initiatives they take part in.

When asked if there is one key message that WECAN's Chair, Sandra McFadyen, would like to pass on to the municipal government, she replied:

"We are so proud of what we are doing. We make wholesale food available at such a reasonable price [to families all across Edmonton]. How can I be a part of that and not be proud of what we do?"

However, despite their passion and continued willingness to serve, our community organizations faced unique challenges throughout the pandemic:

- An influx of clients/ customers
- New demand from people who could no longer get food from other public services due to COVID
- New demand from people who tested positive for COVID-19 and thus had trouble accessing food
- Lack of space due to physical distancing rules

- Lack of freezer space
- Inability to plan (to make purchases, to make confident decisions, etc.) because of the unpredictability of the pandemic
- The need to rapidly develop an online framework
- Fluctuating volunteer availability

- Cancelled in-person fundraisers
- Closures of businesses that regularly donate excess food
- Less funding and difficulty obtaining grants
- Closures of depots or programs due to COVID regulations, while demand rose

While several of these organizations operate traditional charitable models of food provision that do not reduce rates of food insecurity in Canada, they play an invaluable role in feeding our city.

H. We recommend that the City develops a support strategy that meaningfully funds and addresses the needs of these local organizations, for them to expand their reach and sustainably address food waste and food insecurity. The intended support for these models is short-term. Long-term systemic change is needed simultaneously.

The implementation of the aforementioned solutions should be conducted with the input of these local community organizations whose workers, volunteers, and administrators bring valuable expertise and passion to the table. They provide insight into the current food insecurity climate and the efficacy of numerous initiatives.

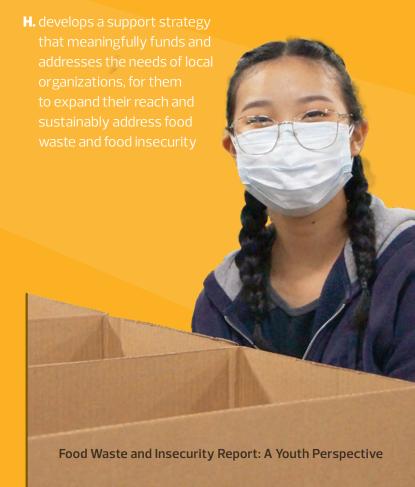
Additionally, the interviewed nonprofit workers were most enthusiastic about including their expertise on municipal initiatives to combat poverty which would, by extension, tackle food insecurity. When asked "why does food insecurity persist despite the work of nonprofits?", "poverty" was one of the few often-repeated answers. As Multicultural Health Brokers explain:

Food insecurity is primarily a symptom of poverty.

In summary, the City of Edmonton Youth Council recommends the City of Edmonton:

- A. joins the Milan Urban Food Policy Pact as a commitment to meaningfully work towards developing quality food systems and achieving food justice
- **B.** pursues actions that educate and train businesses in donating/diverting excess to local organizations
- C. provides local businesses with resources and incentives to develop their individual food waste reduction plans
- **D.** provides grants and incentives that encourage youth–led food waste initiatives
- **E.** works with the Edmonton School Board of Trustees to adopt the Action Kit in classes, clubs, or any alternative programming
- **F.** works with the Edmonton School Board of Trustees to determine the feasibility of building a pathway for food donation between restaurants and schools, where businesses can support initiatives such as free breakfast programs for students.

G. investigates the feasibility of supporting CFCs CFMs, and CFs in Edmonton



Acknowledgements

We are overwhelmed with gratitude for the leaders from Multicultural Health Brokers Co-op, WECAN Food Basket Society, Edmonton's Food Bank, Leftovers Foundation, Food4Good, the University of Alberta, the National Zero Waste Council, and the City of Edmonton for allowing us the opportunity to learn.

The Team







Luka Zvonkovic



Tina Kim



George Xie



Mohammad Abusteit



Andi Superceanu



Abheet Chaudry



Ashwin Anand



Shweta Mulpuri

Sayem Ali Ahmed

References

- 1 https://proof.utoronto.ca/food-insecurity/
- 2 https://www.sharedjustice.org/most-recent/2019/12/23/thehidden-epidemic-of-teen-food-insecurity
- 3 https://www.edmonton.ca/sites/default/files/public-files/assets/ PDF/City_Plan_FINAL.pdf
- 4 https://pub-edmonton.escribemeetings.com/filestream.ashx?DocumentId=94137
- 5 https://spon.ca/food-banks-dont-reduce-food-insecurity-sowhy-did-the-federal-government-give-them-200-million-inemergency-aid/2021/01/27/
- 6 https://cfccanada.ca/en/News-Events/Latest-News/In-themedia-1/News-26-05-12-2016
- 7 https://proof.utoronto.ca/
- 8 https://oneyouth.unicef.ca/sites/default/files/2019-08/ 2019_Baseline_Report_Canadian_Index_of_Child_and_Youth_Wellbeing.pdf
- 9 https://edmontonsocialplanning.ca/2020/10/28/fact-sheet-food-insecurity-during-covid-19/
- 10 https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00039-eng.htm
- 11 https://secondharvest.ca/wp-content/uploads/2019/01/ Avoidable-Crisis-of-Food-Waste-The-Roadmap-by-Second-Harvest-and-VCMl.pdf
- 12 https://secondharvest.ca/wp-content/uploads/2019/01/.pdf

- 13 https://secondharvest.ca/wp-content/uploads/2019/01/ Avoidable-Crisis-of-Food-Waste-The-Roadmap-by-Second-Harvest-and-VCMI.pdf
- 14 http://www.nzwc.ca/focus-areas/food/issue/Pages/default.aspx
- 15 http://www.fao.org/sustainable-development-goals/indicators/1231/en/
- 16 https://www.milanurbanfoodpolicypact.org/wp-content/uploads/2020/12/Milan-Urban-Food-Policy-Pact-EN.pdf
- 17 https://secondharvest.ca/research/the-avoidable-crisis-of-food-waste/
- 18 Commercial Waste Management Services: City of Edmonton
- 19 Food Waste Solutions » Leanpath Food Waste Prevention Solutions
- 20 Winnow | Cutting Food Waste Within Hospitality (winnowsolutions.com)
- 21 https://www.dropbox.com/s/gu4m1h7vypd2c9e/11817-foodmatters-action-kit-inspiring-youth-across-north-americaprevent-food-waste-en.pdf?dl=0
- 22 https://vancouver.ca/files/cov/vancouver-food-strategy-final.PDF
- 23 https://edmontonjournal.com/news/local-news/lack-of-a-nearby-supermarket-creates-food-deserts-in-eight-edmonton-neighbourhoods#:~:text=Her%20community%20is%20one%20 of,kilometre%20of%20the%20neighbourhood%20centre
- 24 https://www.huffingtonpost.ca/entry/community-fridges-canada_ca_5fe13c8bc5b66809cb2cbed6