

Community Food Systems Report Cards as Tools for Advancing Food Sovereignty in City-Regions

Charles Z. Levkoe ¹ , Mary Anne Martin ² , Karen Kerk ³, and Francesca Hannan ⁴

¹ Canada Research Chair in Equitable and Sustainable Food Systems, Lakehead University, Canada

² Research for Social Change Lab, Trent University, Canada

³ CityStudio, City of Thunder Bay, Canada

⁴ Durham Food Policy Council, Canada

Correspondence: Charles Z. Levkoe (clevkoe@lakeheadu.ca)

Submitted: 14 October 2024 **Accepted:** 5 February 2025 **Published:** 16 April 2025

Issue: This article is part of the issue “Perspectives on Food in the Sustainable City” edited by Birgit Hoinle (University of Hohenheim), Alena Birnbaum (University of Kassel), and Petra Lütke (University of Münster), fully open access at <https://doi.org/10.17645/up.i395>

Abstract

Developing pragmatic possibilities for advancing food sovereignty to address challenges of justice and sustainability within food systems is an essential project for human survival. A practical starting point is to identify existing challenges along with comprehensive strategies that avoid isolated fixes. Community food systems report cards are a tool to inform and influence city-region food systems governance by providing a connected and comprehensive snapshot of these systems, connecting people, places, and processes, and informing research, decision-making, and program planning. This article explores and reflects on the experiences of developing community food systems report cards in Thunder Bay and Durham Region in Ontario, Canada. Through sharing lessons learned, cautions, and limitations, we explore the report cards’ origins, development processes, findings, distribution, and impacts. We argue that community food systems report cards can be a valuable tool for understanding a city-region food systems, monitoring progress, identifying gaps, and comparing and communicating experiences to communities, food system stakeholders, and decision-makers. However, community food systems report cards are only the starting point for advancing food sovereignty in city-region food systems.

Keywords

city-region; food policy councils; food sovereignty; food system assessments; food systems report cards

1. Introduction

Advancing food sovereignty to address the critical challenges of justice and sustainability requires pragmatic, local-level approaches to systems change. However, dominant approaches to policy and programming in the minority world tend to address food-related issues in sector-specific and reactive ways rather than considering the complexities of food systems and the structures underlying contemporary problems (Lang et al., 2009; MacRae, 2011). An important starting point is to identify existing challenges through a joined-up approach to develop integrated strategies. Community food systems report cards are a prominent tool to inform and influence city-regional food systems governance by providing a comprehensive snapshot of these systems.

Food systems report cards reflect particular geographies, bringing together a wide range of information to support several practical, reflective, and visionary functions. Levkoe and Blay-Palmer (2018) write, food systems report cards “can provide a lay of the land, act as a benchmark to inform a historical and contextual analysis as well as identify patterns that point towards future developments” (p. 50). They can serve as an essential part of civil society and municipal decision-making by providing a more complete and interconnected picture of a food system (Bell & Morse, 2011; Hezri & Dovers, 2006). One example of a food systems report card is the Conference Board of Canada’s national report card that compared Canada’s food sector performance to 16 other countries, giving Canada an “A” in food safety” and a “C+” in environmental sustainability” (Le Vallée & Grant, 2016). Another example is Meal Exchange’s campus report card that evaluated sustainable and healthy food on Ontario university campuses and found a stark discrepancy between students’ and food service management’s perceptions regarding the provision of such foods (Maynard et al., 2018). The Report Card on Healthy Food Environments and Nutrition for Children examined the impact of policies supporting and preventing improvement of children’s food behaviours (Olstad et al., 2014), while the Food Counts Pan-Canadian Sustainable Food Systems Report Card tracked existing metrics and information gaps across the food system (Levkoe & Blay-Palmer, 2018).

Food policy councils (FPCs) are increasingly using report cards to promote food sovereignty in their work (Harper et al., 2009). Food sovereignty is described as “the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems” (European Coordination Via Campesina, 2024). Schiff et al. (2022) describe FPCs as follows:

FPCs can be defined as collaborative, membership-driven organizations that bring together stakeholders across private (e.g., small businesses, industry associations), public (e.g., government, public health, postsecondary institutions), and community (e.g., non-profits and charitable organizations) sectors to examine opportunities to implement integrated strategies for improving local and regional food systems. (p. 1)

While diverse in structure, FPCs have emerged across North America, Australia, and parts of Europe to address food systems issues and provide a platform for coordinated action across sectors. FPCs have played a role in developing food systems assessments in several municipalities and regions (see for example Beatrice et al., 2017; Ellsworth & Feenstra, 2010; Freudenberg et al., 2018; Los Angeles Food Policy Council, 2020; NYC Food Policy, n.d.; Sudbury-Manitoulin Food Security Network, 2005). These assessments have been a valuable tool for understanding present challenges but also for providing direction for building

more equitable and sustainable food systems by developing democratic and inclusive processes for food systems governance.

In this article, we explore the experiences of two FPCs with developing community food systems report cards, in the Thunder Bay (Thunder Bay and Area Food Strategy [TBAFS], 2023) and Durham regions (Durham Food Policy Council [DFPC], 2024) of Ontario, Canada. This article was co-developed and co-written by the primary creators of the report cards through a collaborative reflection process that involved several discussions, autoethnographic writing, and collective analysis. We explore how the report cards were developed and distributed as well as their findings and impacts. We argue that FPC-led report card projects can help to identify a city-region food system's dynamics while tracking progress and gaps and acting as a communication tool for decision-makers, food systems stakeholders, and the community in general. However, report cards are only the starting point for advancing food sovereignty in city-regional food systems.

2. Context

To set the context for our exploration of community food systems report cards, this section provides an overview of food systems thinking, assessments and indicators, and FPCs as key actors related to this work.

2.1. Food Systems

Pervasive, yet simple food system definitions focused primarily on supply chains tend to obscure the actors, values, and power dynamics that impact and are impacted by food. Food spans multiple sectors (e.g., social relations, health, economic development, sustainability of farmland, forests, waterways, labour relations, etc.), making it difficult for it to fit comfortably in one government department or academic discipline (Barling et al., 2002; MacRae, 2011). However, lack of a comprehensive food systems approach contributes to fractured policy frameworks and an inability to address underlying challenges (e.g., social inequities, environmental exploitation). Conversely, MacRae and Donahue (2013) recommend a relational approach to food systems thinking, one that involves feedback loops connecting sectors, scales, and places through food-related activities. They write, "Food systems thinking reflects an awareness of how actions by one group in the system affect other groups, as well as affecting the environment, the economy, the fabric of society, and the health of the population, and ultimately consumers" (p. 2).

A city-region food systems approach grounds such relationality in place, emphasizing the links and dependencies between the urban, peri-urban, and rural (Blay-Palmer et al., 2018). City-region food systems represent "all the actors, processes and relationships that are involved in food production, processing, distribution, and consumption in a given city region" (FAO, 2025). In addition, FAO (2025) adds:

City region food systems are connected to many other rural and urban sectors (e.g., food security, economic development, water and waste management, energy, transport, health, climate change, governance and spatial planning, etc.). By taking this into account, economic, social, and environmental sustainability linkages can be acknowledged.

Urban food systems are inextricable from their surrounding regions (especially places where food is produced and harvested), and the city-region food systems concept emphasizes this connection.

Food systems definitions centring complexity and interdependence enable joined-up processes for advancing more equitable and sustainable food systems, those which provide the economic, social, and environmental foundations for all people now and in the future (Ericksen et al., 2010; FAO, 2018). They can also demarcate what is possible and point to the actions necessary for realizing such possibilities. In doing so, they call attention to the possibility of building more equitable and sustainable relationships among human and more-than-human worlds through supporting and sustaining food systems.

2.2. Assessments and Indicators

Understanding the realities of food systems in a particular region is essential for decision-making. Food systems assessments use a set of indicators as evidence to document the state of the system and to evaluate change over time. Blay-Palmer et al. (2020) note that indicators are gaining “importance at all scales for policymakers, researchers, and funders, with metrics seen as the way to benchmark, assess, and track food system sustainability from cities to the global scale” (p. 4). However, simply determining a set of relevant indicators and data sources can be a challenging process for FPCs and other groups trying to provide a comprehensive picture of their food systems (Atoloye et al., 2023). In other words, the complex nature of food systems can frustrate efforts to capture them through a set of indicators. When done well, assessments can provide a comprehensive overview of a food system at a given time in a particular place, enhance understanding of relevant issues, and enable comparisons over time and with other regions. As such, they can contribute to civil society action and informed decision-making related to policies and programs. In a discussion of the use of environmental assessments in the policy context, Bauler (2012) argues that indicators are valuable for evidence-based decision-making. He points to contributions of both an instrumental and conceptual use of information.

However, Bauler (2012) also argues that indicators are subject to the politics of their creators and users. Despite their potential, the development and use of food systems assessments runs the risk of reinforcing existing power dynamics. Assessments are not neutral and must be viewed within the context of the people, groups, and interests that created them along with how they are used and interpreted. For example, many assessments take an economic-centered approach that privileges profit-oriented values, regardless of the community and/or place (Levkoe & Blay-Palmer, 2018).

For many practitioners and decision-makers, accessing relevant, up-to-date data can be challenging. While some data are publicly accessible, others are more difficult to locate and acquire and may require specific training and resources to access and interpret. Thus, the identification of indicators may be shaped, in part, by limitations of the data availability (Atoloye et al., 2023; Olstad et al., 2014). For example, Battersby (2020) demonstrates the limited availability of appropriate municipal-level data in the development of a food systems study in South Africa. She argues that more scale-appropriate data are needed. Similarly, Levkoe and Blay-Palmer (2018) found that national level economic-related agricultural data about production and trade were abundant and widely available, yet information about community-based and Indigenous food systems was virtually absent. This incomplete information can mislead decision-makers and practitioners to focus on economic issues as opposed to social and environmental realities. Further, taking indicators in

isolation and out of context can lead to erroneous conclusions (Bauler, 2012; Tanguay et al., 2010). Spring et al. (2020) argue that more place-based comprehensive food systems measurements are required.

2.3. FPCs

The first FPC was set up in 1982 in Knoxville, Tennessee, and by 2023, over 300 operated across North America (Centre for a Livable Future, n.d.; Schiff et al., 2022). FPCs aim to support food systems through establishing connections across sectors within a particular community while advocating for policy change (Calancie et al., 2018; Schiff, 2008). Schiff et al. (2022) identify two characteristics that make FPCs different from other food-related organizations: “(1) their use of a cross-sectoral committee to guide decisions and activities; and (2) their use of a food systems approach” (p. 1). FPCs have increasingly adopted broad goals of food sovereignty that not only aim to make healthy and culturally appropriate food more available and accessible but also ensure that food is produced and harvested in sustainable and equitable ways (Bassarab et al., 2019; Harper et al., 2009; Levkoe & Sheedy, 2017; Moragues-Faus, 2017). A food sovereignty approach is particularly appropriate for FPCs because it focuses on peoples’ right to define and control their own food systems (La Via Campesina, n.d.; Wittman et al., 2010).

The expansion of FPCs constitutes an important approach to city-regional food systems governance. In general, FPCs draw on diverse, local expertise in facilitating the coordination of actions across food systems (Harper et al., 2009). In doing so, they take a food systems approach and respond to uneven power relations across issue areas. Their main roles are typically to offer a forum for actors across sectors to engage in dialogue, identify and advocate for changes in policy, and contribute to the development of programs and services (Harper et al., 2009; Schiff et al., 2022). Several studies have documented FPCs’ focus on policy-related work such as community consultations and advocating for progress on food-related issues (Blay-Palmer, 2009; Clark, 2018; Koski et al., 2018; Scherb et al., 2012). While FPCs can face challenges in securing representation from groups who are traditionally under-represented, their efforts to do so help to promote a more inclusive democratic approach to regional governance (Porter & Ashcraft, 2020), an essential element of food sovereignty.

In the following section, we explore the experiences of two communities in their development of community food systems report cards.

3. Thunder Bay and Durham Region

The province of Ontario, located in central Canada, is home to almost 40% of the country’s population (Statistics Canada, 2024), along with 133 First Nations with unique cultures and languages, representing 23% of the Indigenous population in Canada (Indigenous Services Canada, 2021).

Thunder Bay is a mid-sized city in Northwestern Ontario, situated on the north shore of Lake Superior on the traditional lands of Fort William First Nation, and is signatory to the Robinson Superior Treaty of 1850. It has a population of approximately 109,000 and serves as a regional hub for several rural municipalities and First Nations accessible by road as well as remote communities (Statistics Canada, 2023). The city is located within the census metropolitan area of Thunder Bay along with the municipalities of Oliver Paipooonge and Neebing, the townships of Shuniah, Conmee, O’Connor, and Gillies, and Fort William First Nation. Thunder

Bay's city-region food system faces significant challenges, including a short growing season with cold winters, moderate soil quality that limits agricultural opportunities, few markets for locally produced and harvested foods, and limited distribution lines leading to high transportation costs (Levkoe & Strutt, 2024). According to the most recent data from Public Health Ontario (2024), Thunder Bay's household food insecurity rate has remained consistent from 2019–2020 to 2021–2022 at 16.7%, a level in keeping with Ontario rates of 17.1% and 17.4% over this time. However, it is widely known that food insecurity numbers are significantly underreported (Livings et al., 2023). Moreover, Indigenous populations and other racialized people face significantly higher rates of food insecurity and have limited access to their traditional foodways (Dhunna & Tarasuk, 2021).

The Regional Municipality of Durham occupies the greatest area of any municipality in the Greater Toronto Area with 80% of it sitting within the provincially designated Greenbelt (Durham Region Planning and Economic Development Department, 2019). The region is situated on the territory of the Michi Saagiig Anishinaabeg, occupies a portion of the territory covered by the Williams Treaty, and is the home of the Mississaugas of Scugog Island First Nation. Services and responsibilities across the region are divided between the regional government and Durham's eight lower-tier municipalities (the Cities of Oshawa and Pickering, Towns of Ajax and Whitby, Townships of Brock, Scugog, and Uxbridge, and Municipality of Clarington). Durham constitutes a variety of natural, rural, peri-urban, and urban spaces, with most of its population residing in the south of the region near the north shore of Lake Ontario. Although 84% of the region's land is rural, 92% of its residents live in urban areas (Statistics Canada, 2022). Durham is a growing region, with the current population of 700,000 projected to reach approximately one million by 2041 (Invest Durham, n.d.). Durham contains the greatest total area of land in crops across the Greater Golden Horseshoe (31.2%), and the second-highest proportion of the total number of farms (23.6%; Durham Region Planning and Economic Development Department, 2019). Between 2018 and 2020, 15.5% of Durham residents experienced food insecurity (Durham Region Health Department, 2022). Today one-quarter of Durham households experience food insecurity (Durham Region Health Department, 2025).

Both regions have active FPCs that evolved to address opportunities and challenges in their respective food systems. The TBAFS is a FPC that was established in 2007 and played a central role in developing the Thunder Bay Food Charter that was endorsed by the City Council, the District Social Services Board, and 33 other governments, organizations, and businesses in 2008. TBAFS was officially endorsed by the City of Thunder Bay and five rural municipalities in 2014 (Levkoe et al., 2021). TBAFS receives core funding from the City of Thunder Bay. It is governed by an executive committee and employs a paid coordinator. TBAFS' executive committee is made up of individuals that represent organizations and institutions across the region's food system including representatives from the City of Thunder Bay, an Indigenous organization, a councillor from Fort William First Nation and one from the surrounding municipalities and townships. In addition, the executive committee includes representatives from key sectors including agriculture, health, education, research, business, and the social service sector. In early 2025, the TBAFS incorporated as an independent non-profit organization, renamed the Food Action Network of Northwestern Ontario. TBAFS created its first Community Food Security Report Card in 2015 and an updated version in 2023.

The DFPC was founded in 2010 with a mandate to advance the Durham Food Charter, a community-produced vision which was endorsed by the Durham Regional Council in 2009. DFPC is governed by a small stewardship committee that is comprised of volunteers who have put themselves

forward. It does not have seats designated for representatives of specific communities or sectors, and so, makes efforts to actively seek out input from those who are not represented on the committee, such as municipal and community organization advisors. DFPC receives no regular funding for its operations and has no paid staff. While DFPC invited input from Indigenous groups, the FPC's stewardship committee throughout the report card development process was composed of non-Indigenous women. Its inaugural report card was released in 2024.

4. Two Community Food Systems Report Cards

In this section, we bring Thunder Bay and Durham Region's experiences developing community food systems report cards into conversation by drawing out key themes from our collective reflections (see Table 1) that emerged from a series of discussions between representatives of the two FPCs.

Table 1. Comparing key themes among the Thunder Bay and Durham Region report cards.

| Key Theme | Thunder Bay | Durham Region |
|---------------------|---|--|
| Origins and Purpose | <p>Developed as an assessment tool to make the food system visible and catalyze engagement in food system planning.</p> <p>Funded by federal and provincial government grants.</p> <p>Coordinated by TBAFS staff and executive members; support from postsecondary student.</p> | <p>Funded by federal and regional government and a regional community organization.</p> <p>Coordinated by DFPC members; support from a paid researcher and postsecondary students; guidance from regional municipal staff and community organization advisors.</p> |
| Development Process | <p>Information collected from online databases and sector-specific outreach.</p> <p>Structured around seven pillars identified through community consultation.</p> <p>Includes food system indicators, summaries, community stories, and digital vignettes.</p> | <p>Information collected from key informant interviews and publicly available databases and reports.</p> <p>Structured around the seven food sovereignty pillars.</p> <p>Includes food system indicators, summaries, and recommendations for action.</p> |
| Distribution | <p>Hosted on an interactive virtual platform and shared digitally as a 76-page document.</p> | <p>Shared digitally as a 90-page comprehensive report and 18-page summary document.</p> |
| Impact | <p>Serves as a tool for internal prioritizing and external programming, advocacy, and communication.</p> | <p>Serves as a tool for community awareness raising and in discussions with government and postsecondary administration to advance the development of a regional food system strategy.</p> |

4.1. Origins and Purpose

For both Thunder Bay and Durham Region, the idea of a food systems report card was envisioned as an assessment tool that would present an accessible and concise overview of the city-region food systems using data-based indicators. TBAFS created its first report card in 2015 and a second version in 2023 that included updated statistics and analysis, digital vignettes, and an interactive virtual platform. As part of its work to

actuate the Durham Region Food Charter, DFPC first recommended the development of a report card in a 2013 regional food system environmental scan report. The report card eventually developed out of a second environmental scan in 2021–2022 and was released in 2024. The overall purpose of both report cards was to make the food system visible and catalyze broader engagement and collaboration on city-region food system programming, planning, and advocacy.

To establish its first report card in 2015, TBAFS received funding from a provincial government grant. The process was managed internally by the paid coordinator, with support from the volunteer executive committee. The updated 2023 report card was funded by a federal government research grant and overseen by the TBAFS coordinator, and an advisory committee made up of volunteer executive members. A partnership with faculty and graduate students at Lakehead University played an important role in securing funding and research capacity. A community researcher was also hired to support the work. Dedicated funds for staff and resources made the project viable, though additional resources could have enhanced knowledge mobilization efforts.

To develop the Durham report card, DFPC members provided oversight and assistance to four graduate students from three universities who were key to researching report card models, planning consultations, conducting interviews, proposing indicators, collecting metrics, and designing the report card's structure. Two of these students were hired through a federal government grant, and Mitacs, with matching funding from the regional government. The other two students worked with DFPC to complete a project for academic credit. In addition, Feed the Need in Durham, a regional charity organization, contracted a DFPC member as a researcher to update the food system environmental scan. Though initially conceived as a separate project, this research yielded the information that populated the report card. DFPC members contributed much of the effort to advance the project.

4.2. Development Processes

The development of the Thunder Bay report card drew on statistical data from online databases (e.g., the regional public health unit, provincial government departments, Statistics Canada) complemented by sector-specific outreach to organizations and institutions. Indicators were collected and synthesized from reputable, publicly accessible sources specific to the region. TBAFS had built extensive networks across the region, facilitating data verification, additional data access, and qualitative insights.

In comparison to TBAFS, DFPC had less access to data and data verification due to having fewer direct contacts capable of providing these services. At the outset of the development of the Durham report card, the DFPC team invested significant effort into updating and expanding its contact list so that a wide range of food systems stakeholders could be consulted through online events, a consultation form, and a resident survey followed by key informant interviews. Much of the data for the report card was sourced from publicly available databases and reports (e.g., regional departments, provincial ministries, Statistics Canada, and non-profit organizations such as Food Secure Canada).

Both report cards were designed to provide a baseline for indicators that were structured around a set of key pillars. For Thunder Bay, seven pillars were developed through community consultations; and in Durham Region, the seven pillars of food sovereignty (Food Secure Canada, n.d.) were adopted, and community

consultations were held to determine the report card's design (see Table 2). Both report cards included food systems indicators, measurements, and a summary of observations on what these indicators revealed. DFPC's report card included recommendations for strengthening the data landscape and for action. The TBAFS report card also featured community stories and digital vignettes highlighting local case studies.

Thunder Bay's report card used 119 indicators that were determined by the project team to be reflective of the regional food system, reliable and accessible to the public, replicable over time, and easily understood. Divided into seven chapters that reflect the pillars, the report card was designed to present information that paints a picture of Thunder Bay's progress towards food sovereignty. Each chapter begins with an introductory section that provides context for the indicators, reflections and comments on what the indicators mean, and highlights of initiatives taking place in the community. Durham's indicators act as the report's sub-sections organized around the seven pillars. Indicators were chosen to identify progress on each of the pillars rather than specific data points. This process drew on regionally representative data found in databases, existing research reports, and records that were free and available to the public and collected using sound research methods. This approach facilitated the incorporation of quantitative and qualitative information along with discussion of the region's overall information environment, including gaps in data. Data relevant to each indicator were presented as metrics, with each section including data that were desired but not available. The TBAFS report card did not make explicit recommendations or issue specific calls to action while the DFPC report card includes recommendations for actions that would improve the informational environment and initiatives to advance food sovereignty. These recommendations reflect the opinions that DFPC members themselves developed while compiling the report card. DFPC had conducted a survey and gathered other community input to ground its findings in the broader community's experience, but ultimately it was DFPC itself who decided what to single out as recommendations.

Both FPCs found gaps in available data as well as gaps in representation from specific food systems sectors. For both TBAFS and DFPC, resource and capacity constraints also led to gaps in data collection. Many of the findings that emerged from the DFPC report card pertained to the landscape of available data, such as a lack of information regarding land trusts, environmental impacts of food production, the location of all direct-sale food producers, and the demographics and welfare of food systems workers. Some other marked findings concerned the growing size but diminishing number of farms, the lack of succession planning by most Durham farms, and sharp increases in food bank and emergency meal program usage. The findings from the TBAFS report card presented a picture of growing inflation and the rising costs of food, housing, and transportation, leading to more people struggling to put enough food on the table, the integral nature of forest and freshwater foods to the city-region's food system, institutional procurement of local food driven

Table 2. Report card pillars.

| Thunder Bay | Durham Region |
|-----------------------------|-----------------------------|
| Food Access | Food for People |
| Forest and Freshwater Foods | Values Food Providers |
| Food Infrastructure | Works with Nature |
| Food Procurement | Localizes Food Systems |
| Food Production | Puts Control Locally |
| School Food Environments | Builds Knowledge and Skills |
| Urban Agriculture | Food Is Sacred |

by the City of Thunder Bay, and the development of culinary programs to build student food literacy skills. The report card also highlighted promising initiatives like the creation and implementation of a dignified food access guide by a non-profit organization, the expansion of student nutrition programs, growth of the Thunder Bay Good Food Box, collaboration among seed producers to provide locally adapted, open-pollinated seeds, the development of an online local food directory, and accessible resources for learning about Indigenous food systems.

4.3. Distribution

Thunder Bay's 2023 report card was housed on its own website as an interactive online platform that enabled users to navigate through the different indicators or read one chapter at a time. The report card also included digital vignettes of community projects in each chapter and several infographics. A 76-page version of the report card along with the original 2015 version are both available digitally for download. In January of 2023, a press conference was held at Thunder Bay City Hall to announce its release and it was reported by several regional media outlets. Announcements and links to the report card were also sent to all members of TBAFS to use and share within their networks. Hiring a community researcher with graphic and website design experience was instrumental in creating an interactive report card. DFPC produced two digital downloadable versions of its report card. The first was a 90-page comprehensive document that included background, context, and analysis. The second was an 18-page condensed version focusing on key data for each pillar. Both documents were posted on DFPC's website, circulated to its stakeholder list, and provided in hard copy to key employees of the regional municipality. Funding initially intended for a launch event was diverted to increase the compensation offered to the graphic designer whose scope of work had exceeded DFPC's initial expectations.

4.4. Impacts

Both report cards serve as essential tools to raise awareness about critical food systems issues. TBAFS used its data as the basis for programming, advocacy, and communication to encourage and support food systems stakeholders to get involved in shaping regional food systems priorities and driving actionable initiatives. Feedback from users was very positive and the resulting data have been used as a reference point for the city, researchers, practitioners, surrounding municipalities, and First Nations in their efforts to build a more equitable and sustainable food system (Ghorbankhani, 2023). The report card has also played a crucial role in determining TBAFS' strategic priorities and guiding implementation activities.

Durham Region's report card has also been praised by food systems stakeholders, but it remains to be seen whether its recommendations will be taken up and how actors beyond DFPC will make use of it. DFPC has used the report card as the basis for presentations in meetings with government advisory committees and government representatives and as a key strategic tool to coordinate the development of a regional food system strategy with clear actions.

Moving forward, TBAFS is focused on knowledge mobilization and developing collaborative actionable steps based on insights from its report card and input from community members in the region. There are also plans to develop calls to action and update the report card every five years. DFPC hopes to create updated iterations of its report card, a process that will necessitate increased engagement and cross-sector

collaboration. At this point, DFPC is actively exploring support to develop a comprehensive food systems strategy based on information from the report card.

5. Discussion

As place-based, intersectoral organizations, FPCs are well-positioned to coordinate the development of regional food systems report cards. The experiences of Thunder Bay and Durham Region show that these report cards can serve as a useful starting point for FPCs to provide: baseline information to document the state of a food system with regionally specific indicators; visibility of multiple dimensions of the food system; indications of progress over time; and a catalyst for action. They can be of value to community members, food systems stakeholders, and decision-makers to understand the dynamics of the city-region food system, acting as a living document and basis for ongoing engagement and understanding. The process of developing report cards can also connect people and establish more democratic governance processes. In addition, they can inform research, advocacy, decision-making, and program planning, and can be used as the basis for shaping regional food strategies. In this way, report cards are not only a valuable knowledge product but are also part of a broader process that can build more equitable, healthy, and sustainable food systems.

Report card products and processes have the potential to contribute to advancing food sovereignty. By applying a systems approach to considering regional food landscapes, FPCs help ensure that diverse issues, actors, and perspectives are brought into conversation, thus strengthening conditions for collective, evidence-based, and democratic goal-setting and problem-solving. Consistent with the literature, our findings demonstrate that FPCs can use report cards to present a more complex picture of what a city-region food system looks like and opportunities for action, thereby avoiding fractured policy frameworks and an inability to address underlying challenges. This is particularly relevant for food sovereignty efforts that aim to put decision-making control in the hands of food producers, harvesters, workers across the food chain and eaters (La Via Campesina, n.d.; Wittman et al., 2010). However, as Porter and Ashcraft (2020) determined, attaining broad representation can pose challenges for FPCs. Both TBAFS and DFPC discovered this challenge to be partly rooted in a lack of available data. For example, DFPC was not able to speak broadly to the presence or experiences of racialized, immigrant, or queer farmers because its sole source for farmer demographics, Statistics Canada's Census of Agriculture, only reported on age and sex of farm operators. However, by structuring their work around the goals of food sovereignty, DFPC and TBAFS specifically, and FPCs more generally, centre their communities' right to determine and control their own food systems, thus maintaining the aspiration of broad-based transformation.

Although it can be difficult to adequately resource the development of report cards, the experiences of Thunder Bay and Durham Region show that it is possible for relatively small, grassroots FPCs to mobilize the necessary resources to complete this type of project with few funds. Beyond capacity challenges, there may also be limitations on data availability and potential impact. Not only are there challenges to gathering accessible, reliable, and relevant data, but the data themselves may only represent a point in time and cannot speak to the full complexity of a food system. Even a comprehensive report card can be difficult to engage with and interpret (e.g., too much information and data), may have limited impact on policy and decision-making, or be challenging to replicate in the future. These findings are consistent with the literature that suggests assessments and indicators can be valuable but have limitations due to what data are available and the ability to present them in a complex way (Atoloye et al., 2023).

Reflections on developing report cards in Thunder Bay and Durham elicited several insights about the process. First, the development of a food systems report card should begin with a strong foundation. This includes meaningful cross-sectoral relationships which are often key to accessing, validating, and contextualizing the data. Although network development will likely continue throughout the project, it should also be seen as a precursor to data collection. As such, it is well worth the energy to pull together contributors and users early on in the process. In addition, it is important to consider the structure and dissemination of the report card early in the development process through consultations with community members, decision-makers, and other stakeholders.

Because embarking on the development of a food systems report card is a significant investment of time and energy, it is beneficial to secure funding, community support, and paid staff (e.g., coordinators and researchers). This can reduce having to make compromises and relying on volunteer labour. Being realistic about the amount of time the team is able to dedicate to the project is worthwhile. In retrospect, the research planning could have made more deliberate decisions about determining phases for deciding what to measure and how data will be collected. It is important to be prepared for the challenges of collecting a comprehensive dataset. Even when data are available, it is valuable not to overwhelm users. Report cards need to prioritize what they include and consider how it is presented. Determining a set of relevant indicators and data sources can be a challenging process for FPCs and other groups trying to provide a comprehensive picture of their food systems (Atoloye et al., 2023).

Having a clear vision of the report card's purpose, how it would be used, and therefore its scope was an essential starting point. Consistent with Atoloye et al. (2023), TBAFS and DFPC both found that finalizing a comprehensive but not overwhelming set of indicators, especially given the limits of available data, can be a challenging process. Nonetheless, both FPCs agreed that it is better to be missing some desired information or to add in some unexpected information than to do the data collection without having a solid plan. Report cards should be understood as part of a process of increasing participation in FPCs by bringing in new people and groups that may not initially see themselves as part of a food system. This finding is consistent with literature that proposes that a city-region food systems approach can delineate the interdependencies of already interconnected geographies (Blay-Palmer et al., 2018) and a relational approach to food systems thinking that makes explicit connections among sectors, scales, and places through food-related activities (MacRae & Donahue, 2013).

Finally, since numbers are not neutral, it is important to present the data in context. Moreover, additional effort could have been made to consider framing or subsequent action items and political advocacy (e.g., assigning evaluative grades, providing commentary, including calls to action, etc.). The constitution of the research team along with the motivations, approach, structure, and ideology of the FPC inevitably shaped how the report card was constructed, organized, and disseminated. To advance food sovereignty, report cards can be a valuable tool but are only a starting point that must be followed with action.

6. Conclusion

Community food systems report cards are a valuable tool that provide a snapshot of a regional food system, establish benchmarks, and show the extent of change over time. Moreover, the process of developing a report card can be a valuable community-building initiative to expand networks and impact city-region food systems.

However, report cards are limited by the data available and the ability to pull information together, represent it in an accessible way, and disseminate it to users. Despite the effort to provide a comprehensive picture of a food system, it is challenging to capture the complexity, and report cards can only represent a point in time. While community food systems report cards are important, they are highly influenced by the individuals and organizations that develop them and the context under which they are created. Overall, through sharing the experiences of Thunder Bay and Durham Region, we suggest that developing community food systems report cards is an important step for advancing food sovereignty in city-region food systems.

Acknowledgments

We greatly appreciate the research and development support of the Thunder Bay Community Food Systems Report Card from Maliheh Ghorbankhani, Kendal Donahue, Raili Roy, Sarah Siska, Rebecca Schiff, and Ambili Rajan. We also acknowledge the work of Jenelle Regnier-Davies, Emma Wood, and Derek Chung for their contributions to the Durham Food Systems Report Card project, and all researchers, community reviewers, and advisors.

Funding

We acknowledge funding for this research from the Social Sciences and Humanities Research Council of Canada, Mitacs, the Province of Ontario, the Region of Durham, and Feed the Need in Durham.

Conflict of Interests

Karen Kerk was employed as the coordinator of the Thunder Bay and Area Food Strategy from 2018–2023. Francesca Hannan was employed as a contractor with the Durham Food Policy Council from 2021–2022 and has been a member since 2019. Charles Levkoe served as chair of the Thunder Bay and Area Food Strategy from 2018–2025. Mary Anne Martin served on the Durham Food Policy Council stewardship committee from 2017–2024 and is now a DFPC advisor.

References

- Atoloye, A., Schouboe, S., Misiaszek, C., Harding, J., Stowers, K. C., Bassarab, K., & Calancie, L. (2023). Developing a food system indicators database to facilitate local food systems assessments: Using a scoping review approach. *Journal of Agriculture, Food Systems, and Community Development*, 13(1), 99–112. <https://doi.org/10.5304/jafscd.2023.131.008>
- Barling, D., Lang, T., & Caraher, M. (2002). Joined-up food policy? The trials of governance, public policy and the food system. *Social Policy and Administration*, 36(6), 556–574. <https://doi.org/10.1111/1467-9515.t01-1-00304>
- Bassarab, K., Santo, R., & Palmer, A. (2019). *Food policy council report 2018*. Johns Hopkins Center for a Livable Future.
- Battersby, J. (2020). Data gaps and the politics of data: Generating appropriate data for food system assessment in Cape Town, South Africa. In A. Blay-Palmer, D. Conaré, K. Meter, A. Di Battista, & C. Johnston (Eds.), *Sustainable food system assessment: Lessons from global practice* (pp. 93–110). Routledge.
- Bauler, T. (2012). An analytical framework to discuss the usability of (environmental) indicators for policy. *Ecological Indicators*, 17, 38–45. <https://doi.org/10.1016/j.ecolind.2011.05.013>
- Beatrice, A. B., Elizabeth, M., Meaghan, R. B., Lynn, R., & Rebecca, T. (2017). The Ontario Food and Nutrition Strategy: Identifying indicators of food access and food literacy for early monitoring of the food environment. *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice*, 37(9), 313–319.

- Bell, S., & Morse, S. (2011). An analysis of the factors influencing the use of indicators in the European Union. *Local Environment*, 16(3), 281–302. <https://doi.org/10.1080/13549839.2011.566851>
- Blay-Palmer, A. (2009). The Canadian pioneer: The genesis of urban food policy in Toronto. *International Planning Studies*, 14(4), 401–416. <https://doi.org/10.1080/13563471003642837>
- Blay-Palmer, A., Conaré, D., Meter, K., & Di Battista, A. (2020). Sustainable food system assessment: Lessons from global practice. In A. Blay-Palmer, D. Conaré, K. Meter, A. Di Battista, & C. Johnston (Eds.), *Sustainable food system assessment: Lessons from global practice* (pp. 1–16). Routledge.
- Blay-Palmer, A., Santini, G., Dubbeling, M., Renting, H., Taguchi, M., & Giordano, T. (2018). Validating the city region food system approach: Enacting inclusive, transformational city region food systems. *Sustainability*, 10(5), Article 1680.
- Calancie, L., Cooksey-Stowers, K., Palmer, A., Frost, N., Calhoun, H., Piner, A., & Webb, K. (2018). Toward a community impact assessment for food policy councils: Identifying potential impact domains. *Journal of Agriculture, Food Systems, and Community Development*, 8(3), 123–136. <https://doi.org/10.5304/jafscd.2018.083.001>
- Centre for a Livable Future. (n.d.). *Councils*. <https://www.foodpolicynetworks.org/councils/directory/online/index.html>
- Clark, J. (2018). From civic group to advocacy coalition: Using a food policy audit as a tool for change. *Journal of Agriculture, Food Systems, and Community Development*, 8(1), 21–38. <https://doi.org/10.5304/jafscd.2018.081.004>
- Dhunna, S., & Tarasuk, V. (2021). Black–white racial disparities in household food insecurity from 2005 to 2014, Canada. *Canadian Journal of Public Health*, 112, 888–902. <https://doi.org/10.17269/s41997-021-00539-y>
- Durham Food Policy Council. (2024). *The Durham Food System Report Card*. <https://www.durhamfoodpolicycouncil.com/thedurhamfoodsystemreport2024>
- Durham Region Health Department. (2022). *The price of eating well in Durham Region 2023*. <https://www.durham.ca/en/health-and-wellness/resources/Documents/HealthyLiving/PriceOfEatingWellInDurham.pdf>
- Durham Region Health Department. (2025). *Food insecurity*. <https://www.durham.ca/en/health-and-wellness/food-poverty.aspx>
- Durham Region Planning and Economic Development Department. (2019). *Envision Durham—Agriculture and rural system discussion paper*. <https://www.durham.ca/en/doing-business/resources/Documents/PlanningandDevelopment/Envision-Durham/2019-P-12-Envision-Durham-Discussion-Paper-Ag-Rural-System.pdf>
- Ellsworth, S., & Feenstra, G. (2010). Assessing the San Diego County food system: Indicators for a more food secure future. San Diego Food System; UC Sustainable Agriculture Research and Education Program; UC Davis Agricultural Sustainability Institute. <https://sarep.ucdavis.edu/sites/g/files/dgvnsk5751/files/inline-files/SDCountyFoodshedAssessment2010.pdf>
- Ericksen, P., Stewart, B., Dixon, J., Barling, D., Loring, P., Anderson, M., & Ingram, J. (2010). The value of a food system approach. In J. Ingram, P. Ericksen, & D. Liverman (Eds.), *Food security and global environmental change* (pp. 25–45). Routledge.
- European Coordination Via Campesina. (2024). *Food sovereignty*. <https://www.eurovia.org/our-vision>
- FAO. (2018). *Sustainable food systems: Concept and framework*. <https://openknowledge.fao.org/server/api/core/bitstreams/b620989c-407b-4caf-a152-f790f55fec71/content>
- FAO. (2025). *The CRFS approach*. <https://www.fao.org/in-action/food-for-cities-programme/overview/crfs/en>

- Food Secure Canada. (n.d.). *What is food sovereignty*. <https://www2.foodsecurecanada.org/who-we-are/what-food-sovereignty>
- Freudenberg, N., Willingham, C., & Cohen, N. (2018). The role of metrics in food policy: Lessons from a decade of experience in New York City. *Journal of Agriculture, Food Systems, and Community Development*, 8(B), 191–209. <https://doi.org/10.5304/jafscd.2018.08B.009>
- Ghorbankhani, M. (2023). *Exploring food system assessments as a contribution to sustainability and equity: A case study of the Thunder Bay + area food strategy community food system report card* [Unpublished master's thesis]. Lakehead University. <https://knowledgecommons.lakeheadu.ca/handle/2453/5284>
- Harper, A., Shattuck, A., Holt-Giménez, E., Alkon, A., & Lambrick, F. (2009). *Food policy councils: Lessons learned*. Food First Institute for Food and Development Policy. <https://archive.foodfirst.org/publication/food-policy-councils-lessons-learned>
- Hezri, A., & Dovers, S. (2006). Sustainability indicators, policy and governance: Issues for ecological economics. *Ecological Economics*, 60(1), 86–99. <https://doi.org/10.1016/j.ecolecon.2005.11.019>
- Indigenous Services Canada. (2021). *Indigenous communities in Ontario*. <https://www.sac-isc.gc.ca/eng/1603371542837/1603371807037>
- Invest Durham. (n.d.). *Demographics and statistics*. <https://www.durham.ca/en/economic-development/invest-and-grow/demographics-and-statistics.aspx>
- Koski, C., Siddiki, S., Sadiq, A. A., & Carboni, J. (2018). Representation in collaborative governance: A case study of a food policy council. *American Review of Public Administration*, 48(4), 359–373. <https://doi.org/10.1177/0275074016678683>
- La Via Campesina. (n.d.). *What is food sovereignty?* <https://viacampesina.org/en/what-is-food-sovereignty>
- Lang, T., Barling, D., & Caraher, M. (2009). *Food policy: Integrating health, environment and society*. Oxford University Press.
- Le Vallée, J.-C., & Grant, M. (2016). *Canada's food report card 2015: International comparison*. The Conference Board of Canada.
- Levkoe, C. Z., & Blay-Palmer, A. (2018). Food counts: Food systems report cards, food sovereignty and the politics of indicators. *Canadian Food Studies/La Revue canadienne des études sur l'alimentation*, 5(3), 49–75. <https://doi.org/10.15353/cfs-rcea.v5i3.277>
- Levkoe, C. Z., Schiff, R., Arnold, K., Wilkinson, A., & Kerk, K. (2021). Mapping food policy groups: Understanding cross-sectoral network building through social network analysis. *Canadian Food Studies/La Revue canadienne des études sur l'alimentation*, 8(2), 48–79. <https://doi.org/10.15353/cfs-rcea.v8i2.443>
- Levkoe, C. Z., & Sheedy, A. (2017). A people-centred approach to food policy making: Lessons from Canada's People's Food Policy project. *Journal of Hunger & Environmental Nutrition*, 14(3), 318–338. <https://doi.org/10.1080/19320248.2017.1407724>
- Levkoe, C. Z., & Strutt, C. (2024). Creating a municipal level emergency food plan: Lessons from Thunder Bay, Ontario. *Journal of Agriculture, Food Systems, and Community Development*, 13(4), 19–34. <https://doi.org/10.5304/jafscd.2024.134.016>
- Livingston, M. S., Bruine de Bruin, W., Wilson, J. P., Lee, B. Y., Xu, M., Frazzini, A., Chandra, S., Weber, K., Babbioni, M., & de la Haye, K. (2023). Food insecurity is under-reported in surveys that ask about the past year. *American Journal of Preventive Medicine*, 65(4), 657–666. <https://doi.org/10.1016/j.amepre.2023.03.022>
- Los Angeles Food Policy Council. (2020). *Food system dashboard*. <https://www.goodfoodla.org/blog/food-system-dashboard>
- MacRae, R. (2011). A joined-up food policy for Canada. *Journal of Hunger & Environmental Nutrition*, 6(4), 424–457. <https://doi.org/10.1080/19320248.2011.627297>

- MacRae, R., & Donahue, K. (2013). *Municipal food policy entrepreneurs: A preliminary analysis of how Canadian cities and regional districts are involved in food system change*. Toronto Food Policy Council; Vancouver Food Policy Council; Canadian Agri-Food Policy Institute.
- Maynard, M., Lahey, D., & Abraham, A. (2018). *Campus food report card: The state of food on Ontario university campuses*. Meal Exchange. https://d3n8a8pro7vhmx.cloudfront.net/greenbeltfund/pages/3091/attachments/original/1556644782/Campus_Food_Report_Card_-_Local_Food_Release.pdf?1556644782
- Moragues-Faus, A. (2017). Urban food policy alliances as paths to food sovereignty? Insights from sustainable food cities in the UK. In A. A. Desmarais, P. Claeys, & A. Trauger (Eds.), *Public policies for food sovereignty* (pp. 145–163). Routledge.
- NYC Food Policy. (n.d.). *Food metrics report*. <https://www1.nyc.gov/site/foodpolicy/reports-and-data/food-metrics-report.page>
- Olstad, D. L., Raine, K. D., & Nykiforuk, C. I. J. (2014). Development of a report card on healthy food environments and nutrition for children in Canada. *Preventive Medicine*, 69, 287–295. <https://doi.org/10.1016/j.ypmed.2014.10.023>
- Porter, C. A., & Ashcraft, C. M. (2020). New England food policy councils: An assessment of organizational structure, policy priorities and public. *Elementa: Science of the Anthropocene*, 8, Article 39. <https://doi.org/10.1525/elementa.436>
- Public Health Ontario. (2024). *Quick reference guide: Health equity snapshots*. King's Printer for Ontario.
- Scherb, A., Palmer, A., Frattaroli, S., & Pollack, K. (2012). Exploring food system policy: A survey of food policy councils in the United States. *Journal of Agriculture, Food Systems, and Community Development*, 2(4), 3–14. <https://doi.org/10.5304/jafscd.2012.024.007>
- Schiff, R. (2008). The role of food policy councils in developing sustainable food systems. *Journal of Hunger & Environmental Nutrition*, 3(2/3), 206–228. <https://doi.org/10.1080/19320240802244017>
- Schiff, R., Levkoe, C. Z., & Wilkinson, A. (2022). Food policy councils: A 20-year scoping review (1999–2019). *Frontiers in Sustainable Food Systems*, 6, Article 868995. <https://doi.org/10.3389/fsufs.2022.868995>
- Spring, A., Skinner, K., Simba, M., Nelson, E., Baltzer, J., Swanson, H., & Turetsky, M. (2020). Taking care of the land: An interdisciplinary approach to community-based food systems assessment in Kakisa, Northwest Territories, Canada. In A. Blay-Palmer, D. Conaré, K. Meter, A. Di Battista, & C. Johnston (Eds.), *Sustainable food system assessment: Lessons from global practice* (pp. 42–65). Routledge.
- Statistics Canada. (2022). *Population counts, population centre size groups and rural areas* (Table 98-10-0008-01) [Data set]. <https://doi.org/10.25318/9810000801-eng>
- Statistics Canada. (2023). *Census profile, 2021 census of population* (Catalogue no. 98-316-X2021001) [Data set]. <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>
- Statistics Canada. (2024). *Population estimates, quarterly* (Table 17-10-0009-01) [Data set]. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000901>
- Sudbury-Manitoulin Food Security Network. (2005). *Community food security indicators report card*. City of Greater Sudbury.
- Tanguay, G. A., Rajaonson, J., Lefebvre, J.-F., & Lanoie, P. (2010). Measuring the sustainability of cities: An analysis of the use of local indicators. *Ecological Indicators*, 10(2), 407–418. <https://doi.org/10.1016/j.ecolind.2009.07.013>
- Thunder Bay and Area Food Strategy. (2023). *Thunder Bay and Area Food Strategy community food system report card*. <https://foodsystemreportcard.ca>
- Wittman, H., Desmarais, A., & Wiebe, N. (2010). *Food sovereignty: Reconnecting food, nature and community*. Fernwood Press.

About the Authors



Charles Z. Levkoe is the Canada Research Chair in Equitable and Sustainable Food Systems, a member of the College of New Scholars, Artists and Scientists of the Royal Society of Canada, and a professor in the Department of Health Sciences at Lakehead University. His community-engaged research uses a food systems lens to explore connections between social justice, ecological regeneration, regional economies, and democratic engagement. <https://foodsystems.lakeheadu.ca>



Mary Anne Martin has served on the Durham Food Policy Council (DFPC) from 2017 to 2024 and now acts as a community advisor for the DFPC. As a research associate at Trent University's Research for Social Change Lab and a sessional instructor at Trent School of the Environment, Mary Anne focuses on the influences of policies and programs on people's day-to-day lives, especially with regard to household food insecurity, homelessness, poverty, social divisions of caring labour, the wellbeing of food systems, and the outcomes of community-based food initiatives. She holds a PhD in Canadian Studies from Trent University.



Karen Kerk, as the former coordinator of the Thunder Bay and Area Food Strategy (2018–2023), was instrumental in coordinating community efforts to promote a sustainable and equitable food system. In her current role as CityStudio coordinator at the City of Thunder Bay, Karen facilitates experiential learning projects that connect classroom learning with practical municipal challenges, enhancing student skills and benefitting the broader community.



Francesca Hannan is a member of the Durham Food Policy Council and one of the primary authors of the Durham Food Systems Report Card. She has worked with other local organizations including Green Jobs Oshawa and the Rescue Lake Simcoe Coalition as a researcher, writer, and public speaker. She holds a BA in Economics, Environmental Studies, and Environmental Geography from the University of Toronto.