

EAT THE CITY^{YYT}

What We Learned about Food Systems in St. John's

Introduction

The St. John's Food Assessment is a community process to inform, engage, and take action on food. We understand that issues within our local food system affect people differently depending on where they live, their gender, race and ethnicity, Indigeneity, ability, physical and mental health, and age.

In this report we present a snapshot of food system issues and strengths alongside the findings of a city-wide Household Survey. The information in this report will inform a community action plan on food, with recommendations for policy, programs, and investment to address gaps in our food system.

Project Background

The St. John's Food Policy Council has a vision of a local food system where people and place flourish. In 2018, the Council recommended conducting a Food Assessment to understand, activate, and enhance food security action within the city. Food First NL acts as the backbone organization, building on many years of experience coordinating Community-Led Food Assessments.

Community Involvement

This assessment reflects our community's understanding of challenges in the food system, and what solutions are needed. This project is undertaken in partnership with the St. John's Food Policy Council and guided by a Working Group which includes both organizational appointees and volunteers.

A large, multi-platform Eat The City campaign to *Engage, Inform, and Take Action* food was launched in October 2020. Through many different events, people were invited to discuss food issues and share stories that build our knowledge of actions, programs, and opportunities in St. John's. These activities included:

- 6 group discussions including a community garden walking tour, City-supported climate change workshop, focus groups with food bank operators, Eastern Health's Friday Wellness Group, youth-led event with CSC Go Getters, and a gathering of local food entrepreneurs hosted by Guide to the Good.
- 2 Panel Discussions: *Food Banks and Food Insecurity in St. John's* and *Social Innovation and Enterprise in the Food System*.
- Food System Kickstarter: To promote innovation and entrepreneurship in the food system, 5 teams took part in a pitch challenge around innovative solutions to gaps the Food Assessment had exposed. Winners were granted cash awards to support implementation.
- Conducting a City-wide Household Food Survey. Early analysis was shared in March 2021 through two virtual community updates and Policy on the Rock, organized by the Community Sector Council. Over 800 people shared their experience and insight in the survey and we are grateful for their voices.

Acknowledgments & Thanks

The St. John's Food Assessment would not be possible without significant commitment from our project funders and many supporters in-kind. This project has benefited greatly from students and project staff involved and their contributions have been extensive. Thank you to the Food Assessment Working Group for their guidance throughout: Maggie Burton, Sarah Burton, Michelle Canning, Michelle Corbett, Natalie Godden, Sarah Martin, Cathy Pretty, and Kim White.

Thank you to the grass-roots team of Food Animators, individuals with a passion for food and community who want to share this with others. As Food Animators 10 participants took part in networking and training related to food system action and then contributed 20 hours towards a community project. In partnership with community organizations, these projects ranged from sharing food skills, beginning a community compost, to improving access to culturally appropriate foods in programs.

This phase of the St. John's Food Assessment is supported by the Government of NL's Social Enterprise Action Plan and Community Healthy Living Fund, Eastern Health, Maple Leaf Centre for Action on Food Security, Chevron Canada, the City of St. John's Community Grant.

More information about the assessment, including highlights of community actions, with webinar recordings and much more, is available at: <https://www.foodstjohns.ca/>

In this Report:

Our Food System	Page 3	Disposal: What Happens Afterwards?	Page 13
Production: Who Feeds the City?	Page 5	Potential for Food System Action	Page 15
Distribution: How is Food Moved and Supplied?	Page 7	St. John's Household Food Survey	Page 16
Access: Is Food Available and Affordable?	Page 9	Next Steps for St. John's Food Assessment	Page 27
Consumption: What About the Food We Eat?	Page 11	References	Page 28
		Appendix: Survey Analysis Figures and Charts	Page 31

Our Food System

The food system includes all the activities and resources related to food. For a food system to be sustainable, the full the social, economic, and environmental impact of food must be considered. When a food system is sustainable, all people are food secure, in a way that can sustain us for generations (Food and Agriculture Organization of the United Nations, 2018). This section presents a highlight of issues and initiatives in St. John's, related to food system aspects of production, distribution, access, consumption, and waste.

Locating St. John's

St. John's is the capital of Newfoundland & Labrador, located on the Northeast Avalon Peninsula, with 108,860 residents (Statistics Canada, 2017). With many adjacent communities and as seat of the provincial government, St. John's serves as a hub for a variety of services, shopping, and employment.



This assessment focuses on the municipality of St. John's, building on the potential for civic engagement and action on food. The City of St. John's recently mapped 28 neighborhoods, covering a mix of urban, suburban, and rural development, with wide variations in population density, income, and access to public transportation, retail spaces, and services. Citizens of St. John's are represented in government by an 11 member City Council, 10 Members in the provincial House of Assembly, and 2 federal Members of Parliament.



St. John's Food Policy Council hosted Eat Think Vote to share food issues during the 2019 federal election

Impact of Covid-19

COVID-19 is affecting every element of the food system. International travel restrictions had an immediate impact on food production and processing, which rely on migrant labour. Frontline staff faced an increased risk of exposure and added responsibilities when working with the public. In recognition of this, many grocery store employers added a “hero pay” as their staff were an essential service. However, this increase was temporary despite record sales by major grocery chains throughout Canada. Business closures and the reduction in employment due to COVID-19 overwhelmingly affects low-wage workers. This reinforces systemic barriers in society; for example, recipients of the Canadian Emergency Response Benefit were more likely to be low-income, female, and racialized (Chamandy, 2021).

Throughout the pandemic, many food programs experienced increased requests for assistance, while volunteer participation was limited due to distancing measures and exposure risk. Significant amounts of government aid was focused on supporting ‘emergency’ response through the nonprofit sector. We have been inspired by community-based organizations meeting this need while advocating for long term income-support and social policies to improve the food system permanently.



Photos from Eat the City activities through fall 2020 and winter 2021

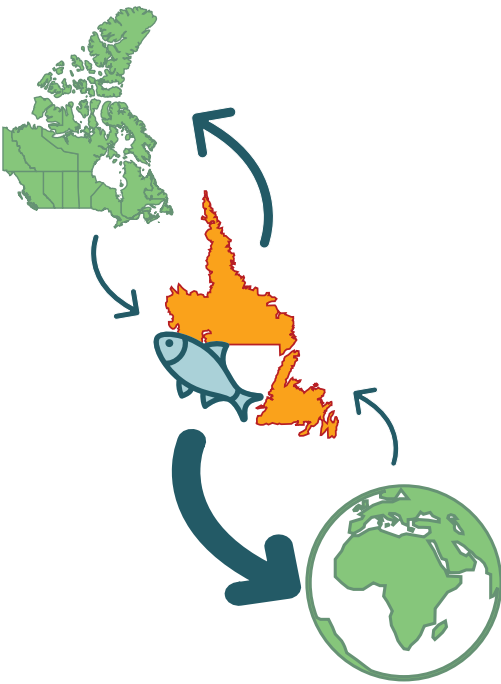
Production: Who Feeds the City?

Food Production includes the growing, raising, and harvesting of fruits and vegetables, seafood, animals, and any other raw materials for food. We are part of a global food system, relying on trade for the food we eat. Defining how much food is produced, within the city, or even the province, is a complex study, particularly when including home production and informal networks.

Of food and nonalcoholic beverages coming into and leaving the province from trade within Canada between 2013-2017, the province imports 5.6 times more food than is traded within Canada (in dollars; Statistics Canada, 2021). Between international destinations and the province, where NL exports 1.6 times more than it imported. Fish is exported from the province at a far greater rate. Within Canada, NL exports more than 12 times what is brought in, and exports to International locations significantly more, at a factor of 35 times.

Value of Trade between the Province of Newfoundland and Labrador, with Canadian Provinces and International Exports

Trade of Fish



12 times more fish is sold to other provinces within Canada; 35 times more fish is exported internationally, than imported to the province.

Trade of Food and Beverages



5.6 times more food and beverages are brought into NL from other Canadian provinces; NL exports 1.6 times more than is imported internationally.

In communications with the Fort Amherst Harbour Master, approximately 1,000,000 lbs of fish including cod, crab, and halibut is landed at Prosser's Rock during April through September each year. However, this is not sold direct from the wharf, and is instead trucked to nearby processing facilities outside of the City, for export and trade.

Agricultural production near and around the City includes 124 farms within the 14 communities of the Northeast Avalon (Statistics Canada, 2016). This represents approximately half of the province's total farm operators. City of St. John's is within an "Agriculture Development Area", part of the Special Management section of the provincial Lands Act with an Advisory Authority that considers changes to land use in these zones. A review of this Area in 2008 highlighted the importance of this agricultural land to the entire province, alongside the challenges of operating in an urban setting, due to land costs and incompatible uses (Government of NL, 2008).

Municipal policy has a major impact on agricultural use of land through zoning and development regulations, and policies related to business operations and licensing. For example, by combining the Commercial Property Tax with the Business Tax, the City has eliminated market value tax on farmland within the City for farmers who also avail of the Real Property Tax Exemption for Agriculture Lands. In home and community production, the City has also recognized the value of urban farming, local food sourcing programs, and community gardens towards a healthy city (City of St. John's, 2019).

Supporting Local Food Production

Here are some examples of organizations supporting agricultural food production.



The O'Brien Farm Foundation stewards a historic 200-year old farm and advances public education on sustainable agricultural practices. With plans for a Learning Centre and a newly launched Incubator Farm Program, aspiring farmers will receive mentorship and support to develop their own farm business. Learn more at: <https://www.obrienfarm.ca/>



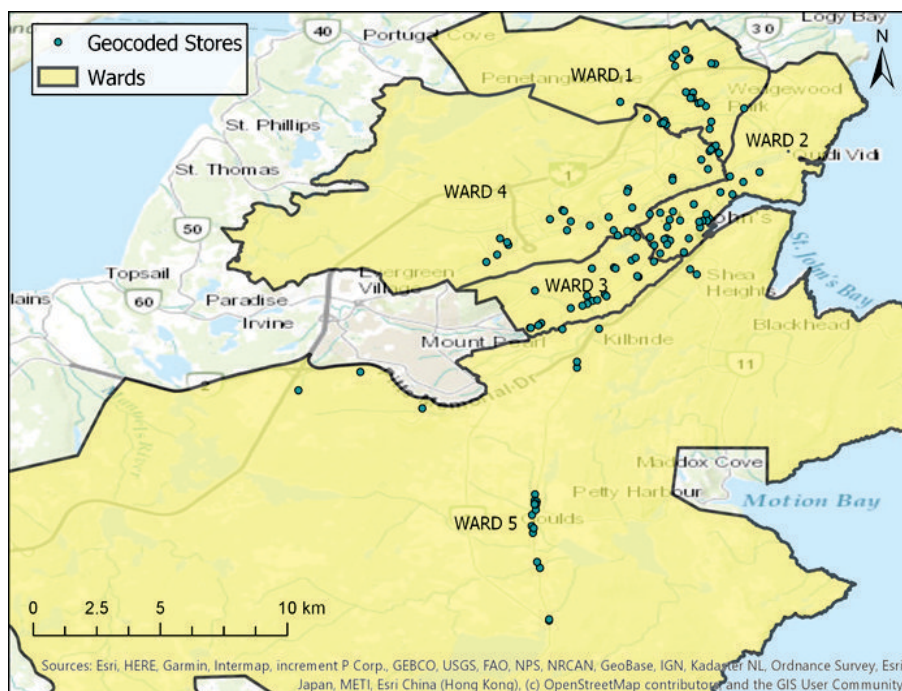
The NL Young Farmers' Forum supports a sustainable agriculture industry and a food self-sufficient province. With many resources and supports for young farmers, a new Interactive Map aims to match existing farmland to with potential farmers. Visit the listings at: www.map.nlyoungfarmers.ca.

Distribution: How is Food Moved and Supplied?

Moving food from one place to another is a complex part of the food system. St. John's has infrastructure by roadway, water, and air involved in the distribution of food. Ground is the most common way the majority of food items reach St. John's, through trucking dried goods, refrigerated, and frozen trucking. Significant warehousing and processing facilities are located in adjacent municipalities of Mount Pearl and Paradise. Through St. John's Harbour, water access to the harbour is owned by the Harbour Authority, Oceanex, Port of St. John's, and the Fort Amherst Small Boat Basin.

Private businesses, from independent to multinational corporations, are the main providers of distribution and food services to retailers and public institutions, such as hospitals and schools. Using data from Service NL, current in September 2019, Dr. Cathy Mah provided insights on type and distribution of food establishments operating in St. John's. There are 803 food establishments in St. John's, which includes licensed food preparation and processing facilities, institutions such as hospitals, childcare centres, care homes, as well as 137 'stores' such as convenience stores, supermarkets, gas stations, retailers, pharmacies, and warehouses where people can buy food.

The City of St. John's recognizes the importance of food amenities in the economy and as part of complete neighborhoods (City of St. John's, 2019). Significant steps have been taken to establish the St. John's Farmer's Market, a community market operated by the St. John's Farmers' Market Cooperative. Growing since 2010, this cooperatively owned nonprofit now leases a City-owned building, acting as a hub for produce, seafood, and prepared food vendors. In 2019, The City of St. John's created a Mobile Food Working Group to assess current practices and design an approach that meets the needs of residents and business operators. This has led to new partnership between the Mobile Vendor Association of Newfoundland and Labrador and the City to manage a space for food trucks and trailers near Bannerman Park.



Retail food locations across wards in St. John's. Image courtesy of Healthy Stores NL Project

Approaches to Food Distribution

These innovative businesses and community organizations are working on issues of food distribution to meet local needs.



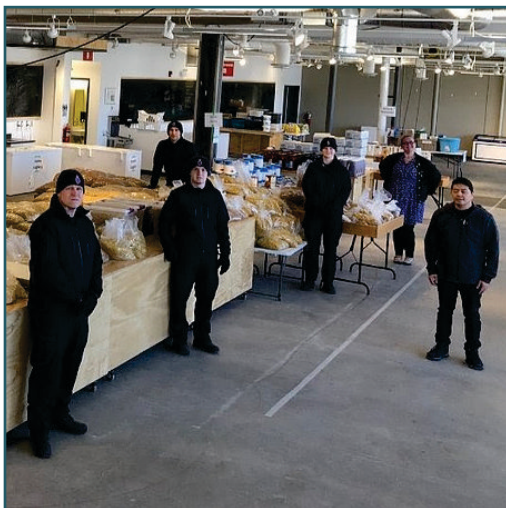
Fish Market App is in development to connect fish harvesters to local consumers through a mobile application to enhance access to and availability of locally caught, sustainably harvested fish and seafood.

Learn more at <https://www.thefishmarketapp.com/>



Big Feed Club launched in 2020, to simplify home delivery of groceries and essentials. They have committed to a living wage for employees and purchasing carbon offsets credits for fuel used in deliveries. With an expanding service area, Big Feed Club aims to offer more locally made and grown products

Learn more at: <https://www.bigfeedclub.ca/>



Emergency Distribution during COVID-19: Community organizations worked quickly to find new ways to reach people and developed a distribution hub while schools were closed due to COVID-19. Nearly \$300,000 in commercial-sized dry goods and frozen food inventory, normally distributed through the School Lunch Associations hot meal program, was shared with food-serving community organizations.

Access: Is Food Available and Affordable?

Access to food considers how food availability and affordability can impact our well-being. Across the province of Newfoundland and Labrador there are high rates of household food insecurity. This means many people skip meals, eat lesser quality foods, or experience stress and social isolation due to lack of food. St. John's has the highest rate of food insecurity among any Canadian city - this affects 1 in 6 households (PROOF, 2020). With a living wage in St. John's calculated at \$18.85 per hour (Saulnier, 2019), it is unsurprising that many people, including those working in food retail and production, are unable to afford the food they need.

Minimum wage, social assistance rates, and many other factors related to food access are influenced by the provincial government. In Budget 2021 the Government of NL announced initial steps towards a renewed poverty reduction strategy, which would track indicators and influence policy related to poverty. Also announced is an increase of the "Mother Baby Nutrition Supplement" from \$60 to \$100 per month for pregnant people and families with children under the age of one, with a net income less than \$25,467. A new 20¢ per Litre tax on sugar sweetened beverages was also announced (Government of NL, 2021). Change in consumer habits and the health impact of this type of tax may present an unfair impact on lower income households if not effectively used for health promotion (Le Bodo, et al, 2016).

The amount of money spent on food is a more flexible aspect of a household budget. People can adjust and substitute how much is spent with costs of rent and bills. The Newfoundland and Labrador Nutritious Food Basket is one tool for monitoring the cost of healthy eating. Costs for a list of representative grocery items for a family of four are gathered across NL. In the most recent 2017 collection, the estimate for the Eastern Health Region is \$261 per week, lower than other regions of the province. The urban area of Eastern Health, including St. John's was \$15 lower than rural areas (Gov of NL, 2017). However costs are increasing overall, rising 10% since 2012. This disproportionately affects lower income households, where a greater share of income is spent on necessities such as rent, bills, and food.

I WISH IT WAS EASIER FOR EVERYONE ON THE ISLAND AND IN LABRADOR TO GET (AND AFFORD) LOCAL GROWN PRODUCE...IT TASTES SO MUCH BETTER. OF COURSE IT'S IMPORTANT FOR THE FARMERS' TO BE PAID WELL FOR THEIR HARD WORK."

- Quote from Household Food Survey

Many food programs exist to help people make ends meet. There are 6 food bank programs including hamper programs and 'food cupboards' and 5 regular meal programs that have take-away and drop-in meals in St. John's. Two charity food distribution organizations are headquartered in St. John's. The Community Food Sharing Association collects and distributes donations to 54 food banks province-wide. Second Harvest has also started a local chapter, focused on food-recovery and distribution efforts.

Taking part in the skills, processes, and ceremony involved with food carries important cultural meaning. Access to culturally appropriate food suits an eater's tastes and traditions. For instance, cultural food for urban Indigenous people may involve sharing the knowledge and skills supporting food traditions with access to harvesting sites. Gaps in the retail availability of ingredients have also been explored in a collaboration called "At Home in the Kitchen" between the St. John's Farmer's Market and St. John's Local Immigration Partnership. This project aims to increase access to, and the diversity of, food options for the multicultural communities within St. John's.

Improving Access in St. John's

These organizations are working to improve economic access and the availability of culturally appropriate food.



Social justice groups like Common Front NL and the Fight for \$15 and Fairness NL campaign, lobby groups to ensure the minimum wage does not trap people in poverty. Newfoundland and Labrador has the fourth lowest minimum wage in Canada.



Citizens Voice Network (CVN) is an initiative of Vibrant Communities and Community Sector Council to make connections between individuals living with low income and service providers. Public forums like "Policy on the Rock" discuss policies and current issues, drawing on the knowledge of people with lived experience.

Learn more at <http://communitysector.nl.ca/vibrantcommunities/>



"At Home in the Kitchen" works to address access to of multicultural food ingredients in NL. This collaboration gathered information and hosted discussions with many cultural communities to develop four social enterprise business briefs that could be used as the starting point for new small businesses or social enterprises.

Consumption: What About the Food We Eat?

The food we eat affects our physical and mental wellbeing. People may choose foods based on their hunger, appetite, and taste. Yet, food “choice” is strongly influenced by the economic factors of cost, income, and availability (European Food Information Council, 2006). Access, skills and time are important considerations alongside social element of culture, family, peers and meal patterns. The food we eat is influenced by our moods and stress, as well as our attitudes, beliefs and knowledge about food.

Higher intakes of fresh fruits and vegetables are associated with lowered risk of some chronic conditions, including cardiovascular disease, type 2 diabetes, and colorectal cancer (Colapinto, Graham and St-Pierre, 2018). Given the multiple issues with food cost, availability, and quality, it is unsurprising that Newfoundland and Labrador has one of the lowest rates of fruit and vegetable consumption in Canada (Statistics Canada, 2017).

In fact, amounts declined in 2017, with less than a fifth of Newfoundlanders and Labradorians reporting eating fruits and vegetables more than five times per day. As the recent “Green Report” bluntly put it, the province has the “highest per capita healthcare spending and poorest health outcomes in the country” (The Big Reset, 2021).

How and where we eat also has an impact on our food. Canada’s Food Guide now includes guidance for healthy habits, including eating a variety of foods, eating with others, to plan meals and cooking at home more often (Health Canada, 2019). How we eat is important. For example, research has shown that older adults were more likely to consume a lower quality diet if they lived and ate alone (Conklin et al., 2014). Public institutions, such as schools and hospitals, feed large numbers of people daily. Recommendations for health-supporting food and habits can be implemented by these institutions to encourage our wellbeing. For instance, Canada is the only G7 country without a harmonized national school food program. Such programs would guarantee the consistent delivery of nutritious meals to all students, without stigma. Institutions also have considerable purchasing power, and if purchasing more locally produced foods, would be drivers for local agriculture, fisheries, and processors.

Food is much more than a ‘basic need’, it nourishes us and is a powerful way to build community. Food is part of celebrations, holidays, and gatherings across St. John’s. Multicultural food fairs and community meals celebrate and share the diverse cultural backgrounds of residents. Innovative restaurants and creative chefs in St. John’s share the unique ingredients and experiences of the area with locals and tourist consumers. Findings from Tourism Café Canada show that culinary tourism opportunities have flourished, with food as a top attractor for visitors (2016).

Changing the Food We Eat

These initiatives, from local programs to provincial organizations and national coalitions, bring people together to improve the well-being of our communities.



Eat Great Participate has been promoting healthy eating to children and youth, and working to increase access to healthy food and beverage choices in recreation, sport, and community settings all across Newfoundland and Labrador.



National Coalition for Healthy School Food advocates for a national school food program and is supported by local organizations: School Lunch Association, Heart and Stroke Foundation, Food First NL, and St. John's Food Policy Council.



The St John's Healthy City Strategy, developed in partnership with Eastern Health, is a 10-year plan to promote the health and well-being of all residents. Community engagement for the strategy is ongoing through 2021.



Find local contacts and information to support food action and programs at Food First NL's Community Food Action Space. This website includes a local food map of programs across Newfoundland and Labrador, a resource library, and trusted information sources for your health.

Find out more at: <https://nlfoodaction.ca/>

Disposal: What Happens Afterwards?

The Food and Agriculture Organization of the United Nations (2013) says that nearly one-third of all food produced in the world for human consumption does not find its way to our tables. Significant amounts of food are “lost” in production, processing, and distribution stages due to lack of proper infrastructure or weather events. Retailers may reject foods that do not conform to their quality and aesthetic standards. Distinct from food loss, “waste” occurs when edible food is discarded by consumers or due to oversupply.

Waste management often focuses on strategies to minimize consumer waste and keep organic materials from landfills. An estimated 30% of all household waste is organic, meaning waste from things that were previously living like plants and animals. When organic waste is covered in landfills, it breaks down and produces methane gas - a greenhouse gas that has 21 times the climate change potential as carbon dioxide. Without curbside or widespread backyard composting, the majority of kitchen waste in St. John’s ends up in landfills. However, leaves, grass and other yard waste in paper bags is collected throughout the summer.

Minimizing the resources needed to package foods is also an important aspect of the waste associated with food. Residents of St. John’s are provided with a biweekly curbside collection of recyclables. Recyclables are sorted into two streams of either paper and containers, but excludes glass items. The Multi-Materials Stewardship Board (MMSB) operates a deposit-refund program to subsidize the recycling of “ready-to-use” beverage containers. MMSB licenses 4 Green Depot locations within St. John’s, where used beverage containers can be dropped off for recycling.

Wasted food in North America generates 193 million tonnes of greenhouse gas

That’s equivalent to 41 million cars driving continuously for a year

* 1  = 1 million cars



Source: CEC Report: Characterization and Management of Food Loss and Waste in North America

Composting and Waste Reduction

These organizations are working on the issue of food waste by composting, recovering food, and minimizing waste.



The City of St. John's, in partnership with the Multi-Materials Stewardship Board and MUN Botanical Garden, offers free backyard composting information sessions to residents of St. John's. Participants can then purchase a compost bin, at a subsidized rate, to encourage backyard composting.



Association Communautaire Francophone de Saint-Jean, St. John's Francophone Association, launched a new Community Composting Initiative to reduce household waste and create garden soil.



Second Harvest is Canada's largest food rescue charity. They recently started operations in NL, to match food donating business to non-profit organizations, who distribute food through their programs.



As part of the Social Justice Co-op, Zero Waste Action Team aims to promote less / zero waste in Newfoundland and Labrador. Learn more at: <https://www.sjcnl.ca/>

Potential for Food System Action

Changes to address a food system issue should be considered against economic, social, and environmental sustainability to ensure there are no undesirable impacts. Using a ‘food system’ approach to policy may require diverse stakeholders to act in a coordinated way and consider the impact across sectors. For example, a proposed Tax Incentive to Prevent Food Waste in 2015 would see a federal tax credit to businesses who donate unsaleable goods to charitable organizations. In practice, this incentive could actually disincentivize efficient management of procurement, production and distribution and not effectively address food insecurity as it relates to income (St. John’s Food Policy Council, 2015).

Faced with the complex issues within the food system, we know that new strategies are needed to positively affect change. A food assessment helps examine a broad range of food-related issues and inform these strategies and actions to improve food security for all.

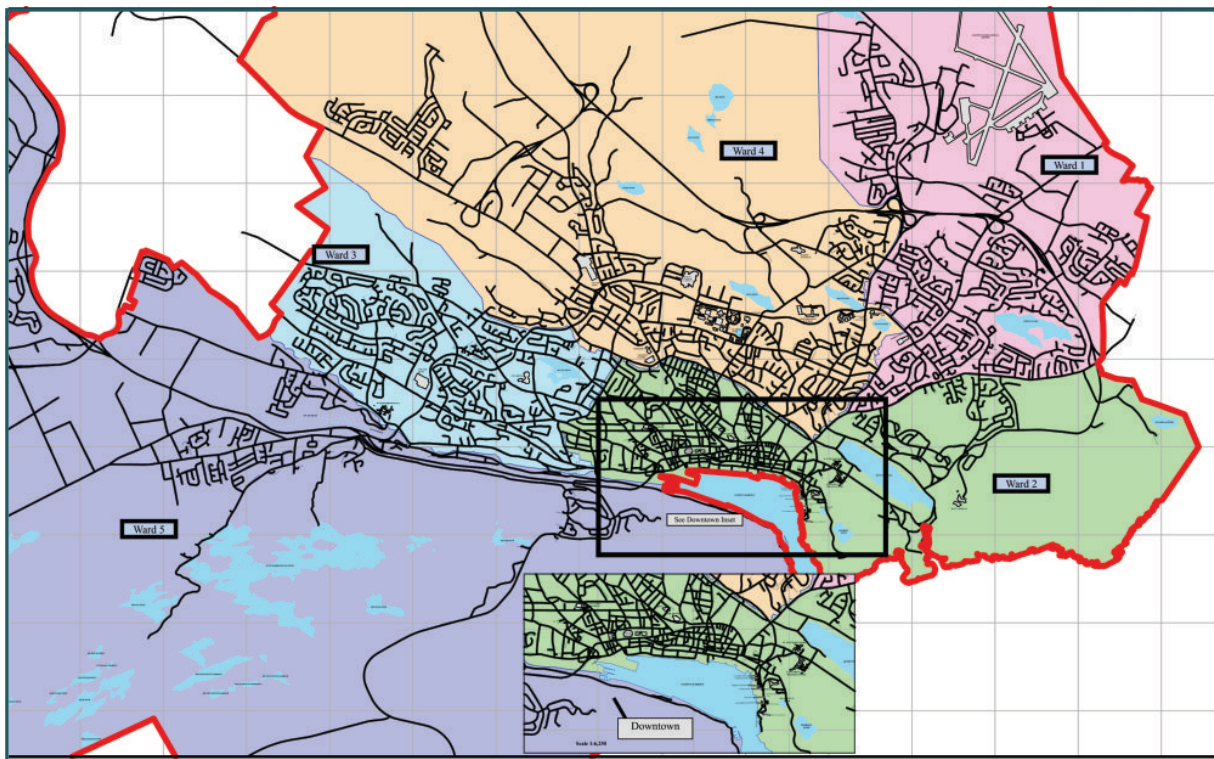


Food Animators gathering at Autism Society of NL Pantry Café and Gardens

St. John's Household Food Survey

A Household Food Survey was conducted to better understand food-related strengths, weaknesses and opportunities for a better food system. Survey questions were developed in coordination with the assessment working group including community organization staff and volunteers. A special thank you to program assistants, Andrew Tsai and Madison Gregory, for their contribution to the survey design and analyses.

The survey was available online through Typeform over a one-month period between January 25th and February 26th, 2020. Paid promotions through social media, as well as Food First NL's mailing lists and contacts were utilized as a means to widen survey distribution and enhance response quantity. The survey was also made available in French in accordance with the official languages of Canada so as to further expand survey distribution and response quantity. Over 1,000 responses were received and reviewed for duplicates, incorrect postal code information, and other errors. As such, following this data cleaning procedure, 802 usable responses were analyzed.



Respondents were asked to indicate their postal code which allowed us to sort the data in accordance with the five city wards of St. John's. Each ward is represented by a Councillor, who as part of the 11 members of City Council, make decisions about city services and programs alongside other factors affecting local businesses.

The Newfoundland and Labrador Centre for Health Information provided Food First NL with a list of postal codes linked to each ward of St. John's. The list was then used to identify residential location of respondents through corresponding wards and postal codes. To make the ward identification process more efficient, Excel functions were utilized. In cases where postal codes bordered or intersected ward boundaries, verification by Google Maps and ward maps were employed. The postal codes which just touch ward boundaries, but do not intersect with other wards, were added to the appropriate ward list, and removed from the intersecting list. Notably, there were some postal codes that crossed ward boundaries. In such cases, the researchers determined which ward is more likely to be the respondents' by assessing the residential proportion of each included ward.

In terms of responses from within St. John's city wards, a total of 802 responses, representing all areas of the city were analyzed. More than 110 responses were received from each ward, but much more was heard from respondents living in Ward 2, who made up 36% (n = 289) of all responses (See Figure 1). Where comparisons are made between wards, the percentage is of the total respondents per ward.

Impact of Covid-19 During the Survey

It is critical to note that during the time in which the survey was open, the city of St. John's was under Level 5 lockdown as a result of the COVID-19 pandemic. The best public health advice was to limit the number of shopping trips and stay within your own bubble. As such, in addition to winter weather, the city lockdown likely affected survey responses and corresponding results. The ongoing effects of COVID-19 on food in the City is still to be determined.

Survey Analysis

Demographic Information

Respondents were asked a series of demographic questions. Most respondents were female (n = 604), followed by male (n = 142), and the minority of respondents described themselves as non-binary, no gender, or two-spirited (n = 21). As the vast majority (75%) identified as female, this may be indicative of a gendered responsibility for food. Such a gender division of food-related responsibilities has been seen throughout history and has been documented as a continuing societal norm into the twenty-first century (Reiheld, 2014). Additionally, the use of social media to promote the survey may have aided in the overwhelming majority of female respondents since females have been shown to use social media (i.e., Facebook, Twitter, and Instagram) more frequently than males (Correa et al., 2010; Gruzd et al., 2017). As well, nearly 75% of respondents identified as white (n = 589), while the remainder identified either as a racialized individual (i.e., Black, Indigenous, or Person of Colour) or unsure of racialized status (n = 49).

Furthermore, respondents ranged in age from below 18-years to above 70-years. A quarter of respondents were between the ages of 30-39 (n = 202), with the number of respondents in each age bracket decreasing as age brackets increased. Notably, nearly one-fifth of respondents were between the ages of 18-29 (n = 153), while only an extreme minority identified as under the age of 18 (n = 3). In addition, most individuals reported at least two adults (aged 18 or older) living in their household (n = 602), followed by almost a quarter reporting one adult (n = 195), and only a few reporting no adults living in their households (n = 2). It is possible these last few respondents misinterpreted the question and failed to report themselves as the only adult living in their household, since it seems unlikely for underage persons to reside in a household without an adult. As well, over half of respondents reported no children living in their household (n = 437), and this frequency significantly plateaued as the number of children in the household increased. Specifically, over a quarter of respondents reported having one or two children in the household (n = 213), and just a fraction had three or more children (n = 25).

Moreover, when asked about annual household income, the majority of responses were split between less than \$20,000 and \$100,000-\$149,999 (n = 103, n = 102), followed by 12.3% reporting an annual income of \$75,000-99,999 (n = 99). All other household income brackets were fairly evenly distributed, ranging from 7.2% reporting \$30,000-39,999 (n = 58) to 11.3% reporting \$50,000-74,999 (n = 91). As such, the majority of households indicated an annual income that fell close to within each extreme of the income spectrum. According to the 2015 Census, the median household (i.e., two or more people) after-tax income is \$77,960, which is quite similar to the present dataset. When asked if respondents perceived themselves to be low-income earners, a quarter reported this to be the case (n = 202), with the majority answering negatively to this question (n = 460) and a fraction who were unsure of their perceived income status (n = 46). As well, one-fifth of respondents reported experiencing unemployment or precarious employment at the time of the survey (n = 162), and nearly one-tenth reported living in a single-parent household (n = 73). In addition, respondents were asked whether they considered themselves to be a senior, a newcomer, as well as whether they identified as an individual with a disability. The former two categories were self-prescribed, and thus respondents who identified as either a senior or a newcomer may not necessarily fit the typical description of such (e.g., seniors are typically classified as 65 years of age or older).

Understanding Where People Obtain Food

Individuals responded to a series of questions about how frequently they shopped for food at different locations. Results, as shown in Figure 5 and 5.1, revealed that 69% (n = 554) of respondents always shopped (i.e., more than once per week) at grocery stores. Additionally, 14% (n = 113) of respondents frequently shopped at retail stores with food, such as Dollarama and Pipers; 9% (n = 73) frequently shopped at convenience stores; and another 9% (n = 73) frequently shopped at small vendors, such as buying directly from a producer or market, or from an independent fish shop or bakery. As the majority of respondents tend to always shop at grocery supermarkets, the next greatest proportion of respondents frequently shop at retail stores with food. Interestingly, this appears to be a growing Canadian movement. As indicated by the nationwide Kantor's Global Monitor data, Canadian consumers continue to demand value for money as well as value for store choice. Particularly, between 2012 and 2017, chain discount retailers (e.g., Wholesale clubs, dollar stores, and soft discounters such as No Frills) have seen sales growth increase more than double (Kristin, 2018).

Method of Transportation Used to Obtain Food

Individuals were asked about the most common method of transportation used to obtain food for their household. Results, as shown in Figure 7 and 7.1, revealed that 75% (n = 602) of all respondents used their own personal vehicle to reach food locations. For those who do not use a motor vehicle to obtain food, the next most common method showed to be 13% (n = 105) of all respondents used active transportation, such as walking, biking, or wheeling; followed by 5% (n = 41) used the bus; 4% (n = 33) acquired a ride with someone else; 2% (n = 17) used a taxi; and 1% (n = 9) reported Other, identified by respondents as equal use across all categories, dependent on the type of trip, and home delivery. Interestingly, there were no respondents in Ward 5 who reported walking, wheeling, or biking to obtain food. Note that Ward 5 follows the centerline of Waterford River, beginning at Blackhead Road Bridge, and bordering the South side of the St. John's Harbour and Petty Harbour-Maddox Cove to the coastline at Horseshoe Cliff. As such, respondents

in this area are likely out of walking, wheeling, and biking distance to any nearby food location, and thus require a motor vehicle or public transportation to reach food destinations. This result may provide a notion of inaccessibility to food locations in Ward 5.

Furthermore, the method of transportation used to obtain food displayed variations in responses according to income. Specifically, while 75% (n = 602) of all respondents used their own personal motor vehicle to travel to food locations, only 25% (n = 26) of those who earn less than \$20,000 annually do so. When the annual income of respondents is \$20,000 to \$29,000, the rate rises to 47% (n = 33), and continues to increase with each annual income bracket. In NL average expenditures for private transportation was \$11,326 per year (Government of NL, 2021). Given that many vehicle costs are fixed, regardless of usage rate or vehicle type, lower income households are likely spending a greater percentage of household income on this expense

Table 1: Percentage of Respondents Using Personal Motor Vehicle to Obtain Food (By Income)

Household Income Level	% of Respondents Using Motor Vehicle to Obtain Food
Less than \$20,000	25.2%
\$20,000 to \$29,999	47.1%
\$30,000 to \$39,999	74.1%
\$40,000 to \$49,999	82.9%
\$50,000 to \$74,999	85.7%
\$75,000 to \$99,999	92.9%
\$100,000 to \$149,999	94.1%
\$150,000 and above	94.1%

Overall Satisfaction with Food Obtained in St. John's

We asked individuals to report their overall satisfaction with the food they can obtain in the city. Results, as shown in appendix Figure 8, revealed that almost half of respondents felt that the food in the city is okay, but they wished some things were different (n = 326). Only 1 in 10, 10%, were very satisfied with the food they could obtain (n = 82). All other respondents wished a few, many, or that all things were different, and were asked to identify the reasons why they were dissatisfied with the city's obtainable foods.

Among all respondents, the reasons for dissatisfaction included: 1) The price of food 67.8%; 2) the quality of food 55.4% 3) unreliable availability of food 45.6%; 4) 32.9% reporting limited options of food; 5) 22.9% reporting inability to find culturally appropriate foods; 5) 9% reporting inconveniences regarding the hours, location, and/or distance of food locations; 6) 4.7% reporting accessibility barriers; and 7) 0.2% reporting too much packaging. Notably, out of 45 respondents who identified themselves as racialized, 66.7% (n = 30) cannot find cultural foods, while only 22.9% of our entire sample identified this issue.

When broken down by ward, most responses were fairly consistent throughout. However, there is a higher proportion of individuals who cannot find culturally appropriate foods in Ward 2 (28.1%) and Ward 4 (30.4%). As well, Ward 2 more often reported dissatisfaction due to limited options (37.2%) relative to other wards. Those in Ward 5 were more likely to report dissatisfaction due to inconvenient hours, distance, and/or locations of food (12.7%), and those in Ward 2 were least likely to report dissatisfaction for the same reason (5.7%). This analysis by ward and demographic could be used for specific actions and intervention to address neighborhood level needs.

“ I work overnights, and since last March there are no options in the city for grocery shopping after about 11pm. This is a huge step-down from having multiple large grocery stores be available at all hours. ”

- Quote from Household Food Survey

Table 2: Reasons (and Frequencies) for Dissatisfaction with Obtainable Food (By Ward)

Reasons	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5
Too expensive	69 (72.6%)	206 (77.7%)	103 (76.3%)	86 (72.3%)	80 (81.6%)
Low quality	59 (62.1%)	166 (62.6%)	83 (61.5%)	71 (59.7%)	65 (66.3%)
Unreliable Availability	50 (52.6%)	139 (52.5%)	68 (50.4%)	59 (49.6%)	50 (51%)
Cannot find cultural foods (Indigenous or intl foods)	23 (24.2%)	81 (30.6%)	28 (20.7%)	41 (34.5%)	11 (11.2%)
Inconvenient (hours, distance, location)	7 (7.4%)	31 (11.7%)	9 (6.7%)	11 (9.2%)	14 (14.3%)
Accessibility barriers	0	16 (6%)	5 (3.7%)	7 (5.9%)	2 (2%)
Limited options	34 (35.8%)	107 (40.4%)	52 (38.5%)	41 (34.5%)	30 (30.6%)
Other: Too much packaging	1 (1.1%)	0	0	1 (0.8%)	0
Other: Low local food accessibility	4 (4.2%)	2 (0.8%)	1 (0.7%)	1 (0.8%)	0

Food Activities by Households

Individuals participate in a range of activities to provide their own food, including home and community gardening, livestock raising, hunting, fishing, and foraging. From the 2016 Census, across Newfoundland and Labrador there is a high rate of participation in outdoor activities such as fishing (44%) and hunting/trapping (40%) and foraging (39%); much higher than the national average (22%,6%,16%).

Respondents were asked about food-related activities that themselves or members of their household take part in. The majority of respondents took part in at least one activity, the most common is picking wild foods (e.g., berries, mushrooms, medicine plants; n = 343) and growing food at home (n = 310). Nearly one-fifth reported fishing (i.e., cod fishing, freshwater, or other; n = 154), 8.6% reported hunting either small or big game (n = 69), 6.1% reported growing food at a community or school garden (n = 49), and one individual reported maple tapping for syrup. When divided by wards, those in Ward 1 were most likely to grow food at home (44.5%). Those in Ward 2 were most likely to grow food at a community or school garden (10.8%), as well as to pick wild foods (48.3%). Respondents in Ward 5 were slightly more likely than those in Ward 1 to partake in fishing (26.4% vs. 24.5%), and those in Ward 5 were also more likely to partake in hunting (20.9%). Of respondents who reported not participating in any food activities, Ward 3 exhibited the highest frequency of this response (47.2%). Nobody in Ward 5 reported growing food at a community or school garden. Some respondents indicated that they did not participate in any of these types of activities (n = 325).

All respondents were asked what would help them to take part in one or more of the food activities listed above. Almost half of all respondents reported that learning hands-on skills would help them take part (n = 391). Then, learning what food is available, safe, and/or legal to harvest (n = 338), followed by a nearly even split between reduced costs of supplies, travel, and/or materials (n = 260) and more connections and mentorship (n = 259). One-fifth reported having no interest in food activities (n = 165), followed by help with transportation (n = 115), and finally, having more time (n = 8), access to space to grow food (n = 7), and other (n = 6). As the majority of respondents provided plausible options for encouraging their participation in food activities, one may assert that many of these choices are viable for increasing household participation in such food-related activities.

Food Programs and Services Used by Households

There are many different programs and services in the city that offer food or make it more affordable. Respondents were asked to select which kinds of food programs their household takes part in. A significant majority of respondents, 78% reported that their household did not use any type of food-related programs and/or services (n = 622). Of the people who used food programs, the food banks were the most most-used (n = 80), representing 10% of all survey respondents. This high figure still does not fully represent the extent of food insecurity in St. John's, as research from PROOF indicates that food banks are often a choice of 'last resort'. People face stigma for using these services, and what is offered is not enough to substantially improve a household's financial circumstances and shift people out of food insecurity. The next most common food programs were participating in school-run meal and snack programs (n = 66), community programs such as gardens, cooking programs, or bulk buying clubs (n = 49), drop-in meals (n = 20), and food vouchers from a community group (e.g., Healthy Baby Clubs; n = 19).

When broken down by ward, frequency of food bank use was highest in Ward 3 (13.2%) and lowest in Wards 1 and 5 (5.5%). Use of food vouchers from a community group were also highest in Ward 3 (4.4%), and use of school-run meal and snack programs was highest in Ward 1 (12.7%). As per use of drop-in meals, the highest frequency of use was between Wards 2 and 3 (3.1%), and Ward 5 reported no use of drop-in meal services. The overall low rate of drop-in meal use may reflect that most only serve adults; this limits the use of these services by families with young children. Finally, the use of community programs such as gardens, cooking programs, or bulk buying clubs was most often used by respondents in Ward 2 (8.7%).

Of those who used food programs, respondents were asked to describe in their own words, which food programs worked best for them. Fewer people provided a response to this open-ended question. Drawing from the respondents (n = 149), the majority of responses were split between food banks (n = 44) and school lunch or breakfast programs (n = 43). When asked why or why not their chosen food program worked best for them, respondents indicated a preference for availability or location (i.e., close, easy to get to; 16%), as well as free or 'pay what you can' programs (15%). Many also reported the guarantee of healthy/hot meals (7%) as a reason for their choice of food program, particularly with regards to school lunch or breakfast programs. One respondent stated, "We do not have a budget that allows for nutritious foods to be ready for school, so this program helps a lot", and another noted, "there is no stigma attached to using the service", as well as "no judgement" surrounding students who use these programs. The primary issues respondents had with their chosen food programs included health concerns (i.e., their own health or relating to the quality of food; 4%) and distance (2%).

“ The food system is broken. It is too expensive to buy healthy foods and wages are too low while cost of living continues to skyrocket. We need a higher minimum wage to stimulate our economy, and we need less grocery store waste especially when people are not able to access food for themselves. ”

- Quote from Household Food Survey

All respondents were asked what would better enable them to take part in food programs in the city. While the majority of respondents (n = 383, 48%) reported having no interest in such programs, 37.5% (n = 301) indicated that learning what is available in their neighbourhood would help them to take part. Additionally, 20% of respondents (n = 160) reported more connections and mentorship would help, followed by 19% (n = 152) who reported reduced participation costs (e.g., supplies, travel, and/or material), and 11% (n = 88) reported improved transportation would better enable them to take part.

Sharing Food and Volunteering in Food Programs

Respondents were asked how often they shared food or received food from their friends and family. About one-third (n = 268) of respondents revealed they sometimes do this, followed by nearly a quarter who report they often do this (n = 197). 21.1% reported rarely sharing food with or receiving food from family and friends, 11.6% of respondents answered never, and 7.1% reported always doing this.

Additionally, respondents reported whether they ever donated food or volunteered to help food programs. Strikingly, the overwhelming majority responded affirmatively to this question (84%; n = 674), stating they have done so, leaving only 10.3% of our sample (n = 83) who reported not having performed either of these behaviours, and 2% who were unsure.

Changes and the Future of Food in St. John's

To provide direction for future action, the survey asked about the changes most needed in their neighborhood to improve access to food. Respondents were asked to rank a list of potential neighbourhood changes they perceived as most needed to improve food access (1 = Most needed; 5 = Least needed). Across all wards of the City, as seen in Figure 9, results showed that income solutions (i.e., increasing wages and/or assistance rates) was clearly ranked as the most important change. Income solutions were then followed by improvements in local transportation, followed by changes in stores and/or places to buy food, implementation of new or improved food programs, and lastly, increasing/preserving access to growing, fishing, and hunting.

Notably, income solutions were also ranked as most important across demographics of age and income. This is critical since respondents who reported even the highest annual household income agree that income solutions are the most necessary to improve access to food. The overwhelming consistency amongst response ranks between wards and demographics may be reflective of the city's desire for positive change and action.

“

Food prices have become impossible for a person on low income such as myself to afford. It's impossible to follow Canada food guidelines. I cannot access food banks due to transportation. I live on lentils, beans and tinned foods from the dollar store mostly brought to me by family because I'm mobility impaired. It's impossible to remain healthy. I have medical issues impeding work so I rely on Social Assistance. Which nowhere near give me access to wholesome food. It's untenable.

”

- Quote from Household Food Survey

Respondents were asked about their thoughts and reflections regarding the future of food in St. John's. This open-ended question received 409 responses. The most common suggestions emphasized the importance of growing food locally, through farms, home, and community gardening (n = 118; 28.9%). Many also noted the need for our province to invest more in self-sufficiency and quality, such as being “less reliant on the mainland transports”, “for local products to be available in chain grocery stores”, and hoping to see “...the overall quality of food in Newfoundland improve”. Many respondents remarked on the potential of our province to become a leader in local food production, with one such quote being, “NL needs to become a leader in increasing access to organic and free-range products...we have the acreage available”. These notions are confirmed by the fact that our province imports from other provinces and Canada 71% of the food we eat, particularly reliant on imports for fresh fruits, vegetables, beef, pork, and packaged foods (Agriculture and Agri-Food Canada, 2013).

The next most substantial response regarding the future of food in the city was split between addressing cost of living (i.e., food, rent, bills, transportation, and low working wages; n = 93; 22.7%) and the type or variety of local food (n = 93; 22.7%). Specifically, a key theme regarding the cost of living is the disparity between income and assistance rates and the costs of utilities and food. One respondent quoted, “For a city of this size, I think there are many good food options, but they are inaccessible to a lot of people because of cost and transportation. People need an adequate living wage and accessible, convenient, safe ways to get around”; and another respondent put it, “the cost of living is going up, but people getting government assistance have not seen any increases in years”; and one even addressed the government directly quoting the need “to reduce reliance on charity and empower our community members to be able to choose their own food...government needs to STEP UP and improve financial support for our most vulnerable”.

Moreover, respondents have expressed a desire for an enhanced variety of local foods, and a “larger variety of local meats and ingredients”. This suggests a local demand for increased local food production as a policy change. To have these foods readily available is also suggested. One respondent remarked, “I think local food should be available everywhere. The main option is the farmer’s market which is not the most convenient place to shop. More stores like Urban Market 1919 would be a step in the right direction”. Another stated, “I have a backyard that I would love to turn into a community garden...Where do I start?”; and another, “More programs for the entire population at low or no cost to train in harvesting local foods”.

Another significant volume of responses were concerned with how location, availability, and transportation affected access to food (n = 83; 20.3%), as well as the ability to obtain healthy/quality food or maintain well-being (n = 78; 19.1%). Some relevant respondent quotes include: “Many neighbourhoods in the city require a private vehicle to access food sources regularly, while also lacking reasonable and efficient public transportation to use as an alternative”; “Although the Farmer’s Market and Lester’s Farm are great, there should be more access to [locally] grown food...not everyone can make it to the Farmer’s Market”; and, “Access to affordable, locally produced and nutritious food would improve the mental and physical well-being of the general population”.

Critically, there is agreement across all 5 wards for the types of issues and possible solutions suggested by respondents. With that being said, we thought it was necessary to report some of these response highlights by ward. Firstly, out of 48 respondents in Ward 5, 29.2% referenced the cost of living as a reluctance when reflecting on the future of food in St. John’s, 27.1% noted the type or variety of local food, and 25% were concerned with access to food. Of the 73 respondents in Ward 4, 27.4% recommended growing food locally through private or community gardens, 26% remarked on the type or variety of local food, and 17.8% stressed the cost of living when considering the future of food in our city. Of those in Ward 3, totalling 88 responses, 29.5% expressed interest in growing food locally, 19.3% were concerned with the type or variety of local food, and 18.2% pointed out the dire cost of living. Out of the 135 respondents in Ward 2, 31.1% felt a need to grow more food locally, 25.2% regarded the cost of living as a pressing issue for the future of food, 23.7% requested more variety of local food, and 23% noted access to food as a key issue. Lastly, a total of 65 responses came from Ward 1, and of these, 32.3% recommended more local growing opportunities (private or community), 24.6% addressed the cost of living, another 24.6% addressed obtaining healthier, higher quality products for better health, and 20% noted the barrier of food access.

“ The access to food here is so different in the winter compared to the summer: in winter there are fewer fresh options, more packaging, harder to walk or take transit to local food places. (...) but in the summer fresh food is much more plentiful, cheaper, and easier for me to find. I want to find ways to "extend the good food access season" here just as a greenhouse can extend the growing season. ”

- Quote from Household Food Survey

Summary of St. John's Household Food Survey

Issues within the food system affect people in the city differently based on many factors. The highlights here indicate some areas for further action to improve food access throughout the city:

Although 75% of all respondents used their own vehicle to get to food, only 25% of households with incomes under \$20,000 or less do so.

- Type of transportation used to obtain food is linked to household income and neighborhood characteristics. Infrastructure for safe & effective public transit and active transportation will have a significant impact in the City.

90% of people were dissatisfied in some way with the food they could obtain in St. John's.

- By ward, a higher proportion of individuals cannot find culturally appropriate foods in Ward 2 (28.1%) and Ward 4 (30.4%). Those in Ward 5 were more dissatisfied due to inconvenient hours, distance, and/or locations of food than others.
- While 'access to cultural food' was an issue for 23% of all respondents, it was an issue for 67% of respondents who are Black, Indigenous, or a Person of Colour.

The price of the food, and concerns about cost of living, is a significant source of dissatisfaction and stress among all respondents.

- Income solutions, through increased wages and/or social assistance rates, is the top priority to improve access to food with agreement from people across all neighborhoods, income levels, and ages in St. John's.

People are involved in many informal networks to gather and share food.

- Hands on skills and learning about how to safely harvest are top priorities to take part in food gathering.
- Of people who wished to take part in more community programs, many would like to know more about what is available near them.

Increased retail options and improved transportation are important changes people would like to see; there is significant interest in supporting innovative and community minded local food businesses to meet the specific needs in each neighborhoods.

- Although protection of land for growing was less important, the ability to increase home and commercial food production was seen as a critical part of the future of food.

Next Steps for the St. John's Food Assessment

Food Assessments help communities take on complex issues by working together and using our strengths. The information and stories collected in this document have improved our understanding of local system issues in St. John's and identified initial opportunities for food system improvements.

Food First NL continues community engagement with residents, organizations, and policy makers towards a Food Action Plan for St. John's in 2021. Already, new fund development and partnership priorities at Food First NL and other organizations have begun. Securing resources to support new or strengthened initiatives is important for action on food. Expected outcomes of this work include a focus on improved collaboration and coordination with community-based organizations.

There is an opportunity to include food system issues with strategic planning initiatives. The Healthy City Strategy, undertaken by the City of St. John's, would see access to food embedded in strategies, programs, and policies as part of healthy neighborhoods and people. Provincially, a process is underway to create a new 10-year "Health Accord", with discussions focused on the social determinants of health and food taking a prominent place. The provincial government has also committed to a renewed Poverty Reduction Strategy which should focus even more effort and attention on food access.

Thank you to the hundreds of residents who have given their time to share thoughtful input on food in St. John's. We are certain that work to shift these systems will attract just as much, if not more, commitment and energy to ensure a local food system where people and place flourish.



Community gathering to debrief Snowmageddon response, February 2020

References

- Agriculture Development Area Review Commission. (2008). *The report of the St. John's urban region (agriculture)*. Submitted to Kathy Dunderdale, Minister. Retrieved from <https://www.gov.nl.ca/ffa/files/publications-pdf-sjur-dev-area.pdf>
- Agriculture and Agri-Food Canada. (2013). Newfoundland and Labrador's Agriculture Industry. Retrieved from http://publications.gc.ca/collections/collection_2016/aac-aafc/A22-12230-2014-eng.pdf
- Chamandy, A. (2021, June 2). CERB recipients more likely to be low-income, female, and racialized: StatCan. iPolitics. Retrieved from <https://ipolitics.ca/2021/06/02/cerb-recipients-more-likely-to-be-low-income-female-and-racialized-statcan/>
- City of St. John's. (2019). Envision St. John's Municipal plan. February 2019 Draft. Retrieved from <http://www.stjohns.ca/sites/default/files/files/publication/Draft%20Plan%20February%2026%202019%20Website.pdf>
- Colapinto, C. K., Graham, J., & St-Pierre, S. (2018). Trends and correlates of frequency of fruit and vegetable consumption, 2007 to 2014. Statistics Canada, Catalogue no. 82-003-X. In Health Reports, 29(1), 9-14. Released January 17, 2018. Retrieved from <https://www150.statcan.gc.ca/n1/en/pub/82-003-x/2018001/article/54901-eng.pdf?st=0gd2Nh4F>
- Conklin, A. I., Frouhi, N. G., Surtees, P., Khaw, K. T., Wareham, N. J., Monsivais, P. (2014). Social relationships and healthful dietary behaviour: evidence from over-50s in the EPIC cohort, UK. *Social Science & Medicine*, 100(100), 167-175.
- Correa, T., Hinsley, A. W., & De Zuniga, H. G. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior*, 26(2), 247-253.
- European Food Information Council. (2006, June 6). The factors that influence our food choices. Retrieved from <https://www.eufic.org/en/healthy-living/article/the-determinants-of-food-choice>
- Food and Agriculture Organization of the United Nations. (2013). *Food loss and food waste*. Retrieved from: <http://www.fao.org/food-loss-and-food-waste/flw-data>
- Food and Agriculture Organization of the United Nations. (2018). *Sustainable food systems: Concept and framework*. Retrieved from <http://www.fao.org/3/ca2079en/CA2079EN.pdf>
- Food Insecurity Policy Research (PROOF). (2020). *Household food insecurity in Canada*. Retrieved from: <https://proof.utoronto.ca/food-insecurity/>
- Food Banks Canada. (2019). *HungerCount 2019 report*. Retrieved from https://hungercount.foodbankscanada.ca/assets/docs/FoodBanks_HungerCount_EN_2019.pdf

- Gruzd, A., Jacobson, J., Mai, P., & Dubois, E. (2017). *The state of social media in Canada 2017*. Retrieved from http://www.niagaraknowledgeexchange.com/wp-content/uploads/sites/2/2018/07/Report_State_of_Social_Media_in_Canada_2017.pdf
- Government of Newfoundland and Labrador. (2021). *Average expenditure per household: Newfoundland and Labrador 2010-2019*. Statistics Canada (Table 11-10-0222-01). Retrieved from https://stats.gov.nl.ca/Statistics/Topics/personalfinance/PDF/Avg_Hhld_Expenditure_NL.pdf
- Health Canada. (2019). *Canada's food guide: The new food guide*. Office of Nutrition Policy and Promotion. Retrieved from <https://www.canada.ca/content/dam/hc-sc/documents/services/canada-food-guide/resources/stakeholder-toolkit/canada-food-guide-presentation-eng.pdf>
- Kristin, K. (2018, February 3). The discount disruptors to watch through 2020. *Canadian Grocer*. <https://canadiangrocer.com/blog/the-discount-disruptors-to-watch-through-2020-79091>
- Le Bodo, Y., Paquette, M. C., & De Wals, P. (2016). *Taxing soda for public health: A Canadian perspective*. New York, NY: Springer International Publishing.
- Mah, C. (2019-2022). Healthy Stores NL. *Unpublished manuscript*.
- Mah, C. L., Taylor, N. G. A., Pomeroy, S., & Hasdell, R. (2017). *Rig your fit out: An environmental scan of food policy levers for the city-region of St. John's*. Internal Report for the Leslie Harris Centre of Regional Policy and Development. St. Johns: Food Policy Lab. Retrieved from https://www.mun.ca/harriscentre/reports/MAH_ARF_14-15.pdf
- Newfoundland and Labrador Statistics Agency. (2018). *Newfoundland and Labrador nutritious food basket: Average weekly cost for a family of four*. Retrieved from https://www.stats.gov.nl.ca/publications/pdf/nl-food-basket_28273067.pdf
- Reinheld, A. N. C. (2014). *Gender norms and food behavior*. In Paul Thompson and David Kaplan (eds.), *Encyclopedia of Food and Agricultural Ethics*.
- Statistics Canada. (2016). *Participation in outdoor activities in the past 12 months by age, group, sex, current employment status, and perceived health, Canada, provinces, and regions*. (Table number 45-10-0030-01). Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4510003001>
- Statistics Canada. (2016). Table 32-10-0403-01, Farms classified by farm type. Retrieved from <https://doi.org/10.25318/3210040301-eng>
- Statistics Canada. (2017). *Division No. 17, CDR [Census division], Saskatchewan and Newfoundland and Labrador [Province] (table)*. Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. Retrieved from <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>

- Statistics Canada. (2017). Table 13-10-0096-12. *Fruit and vegetable consumption, 5 times or more per day, by age group*. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310009612&pickMembers%5B0%5D=1.2&pickMembers%5B1%5D=3.1&cubeTimeFrame.startYear=2015&cubeTimeFrame.endYear=2017&referencePeriods=20150101%2C20170101>
- Statistics Canada. (2019). Fruit and vegetable consumption, 2017. Health Fact Sheets. Retrieved from <https://www150.statcan.gc.ca/n1/pub/82-625-x/2019001/article/00004-eng.htm>
- St. John's Food Policy Council. (2015). *Briefing Note to Municipal Leaders in Newfoundland & Labrador: Response to the National Zero Waste Council's proposed tax incentive to prevent food waste*. Retrieved from https://drive.google.com/file/d/0B_PJOzHSqnicnJxU2w4cVVWRDg/view?usp=sharing&resourcekey=0-As_nbQc5PjNjFLAYM0_3_g
- Tourism Café Canada & Brain Trust Marketing & Communications. (2016). *North East Avalon tourism destination appeal appraisal: Realizing the possibilities*. Retrieved from <https://www.gov.nl.ca/tcar/files/TDVAA-NEA-Sept2016.pdf>

Appendix

Figure 1: Count of Responses by Ward

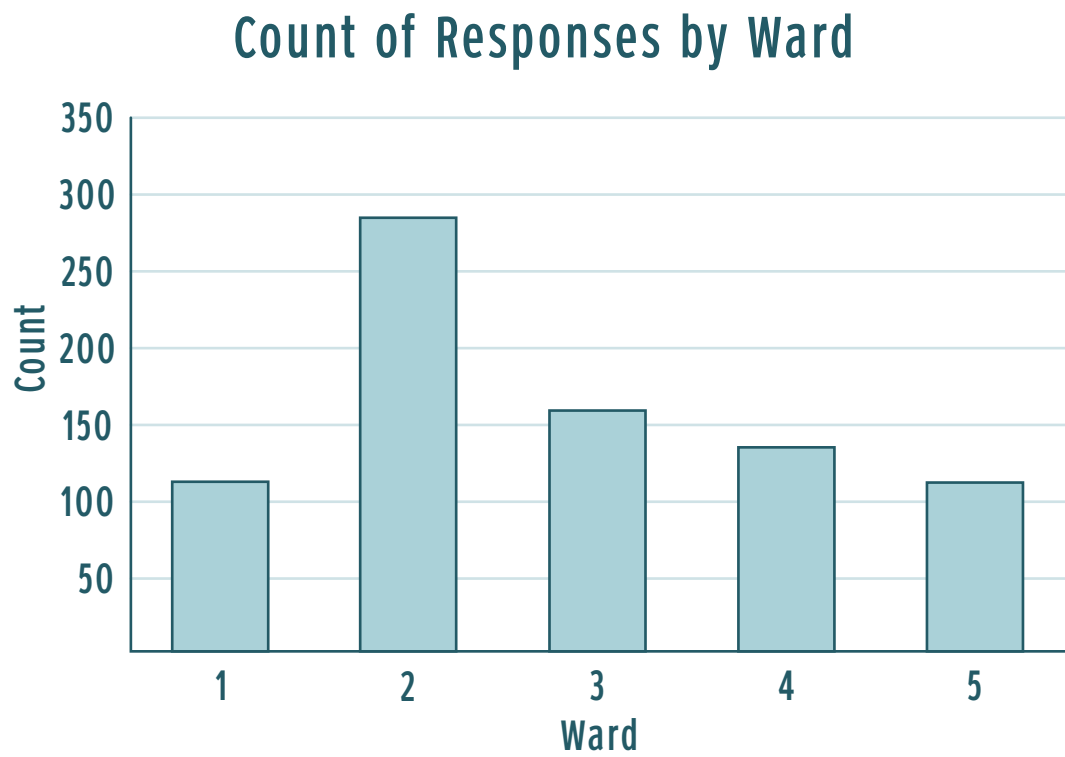


Figure 2: Frequency of Obtaining Food from Small Vendors

Frequency of Obtaining Food from Small Vendors

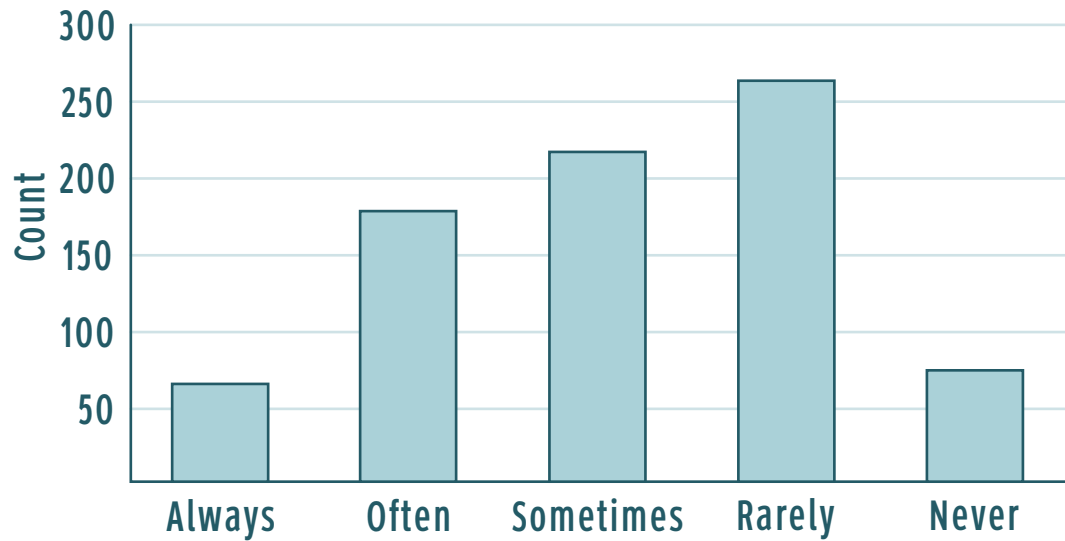


Figure 2.1: Percent Frequency of Obtaining Food from Small Vendors by Ward

Percent Frequency of Obtaining Food from Small Vendors by Ward

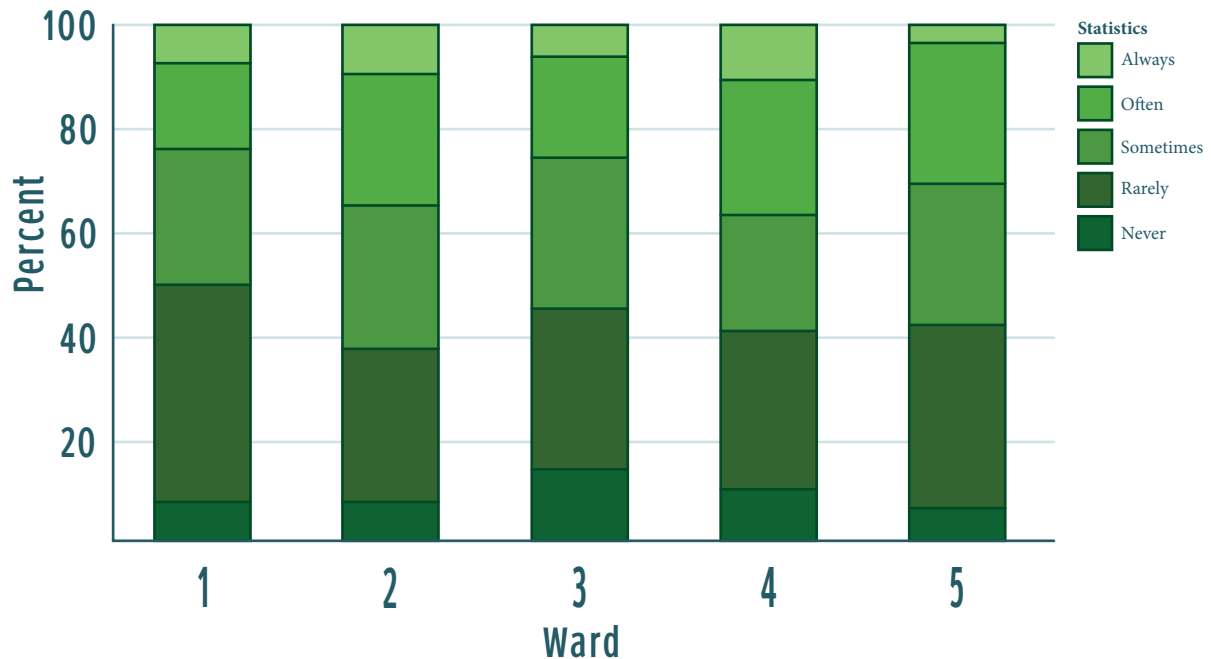


Figure 3: Frequency of Obtaining Food from Convenience Stores

Frequency of Obtaining Food from Convenience Stores

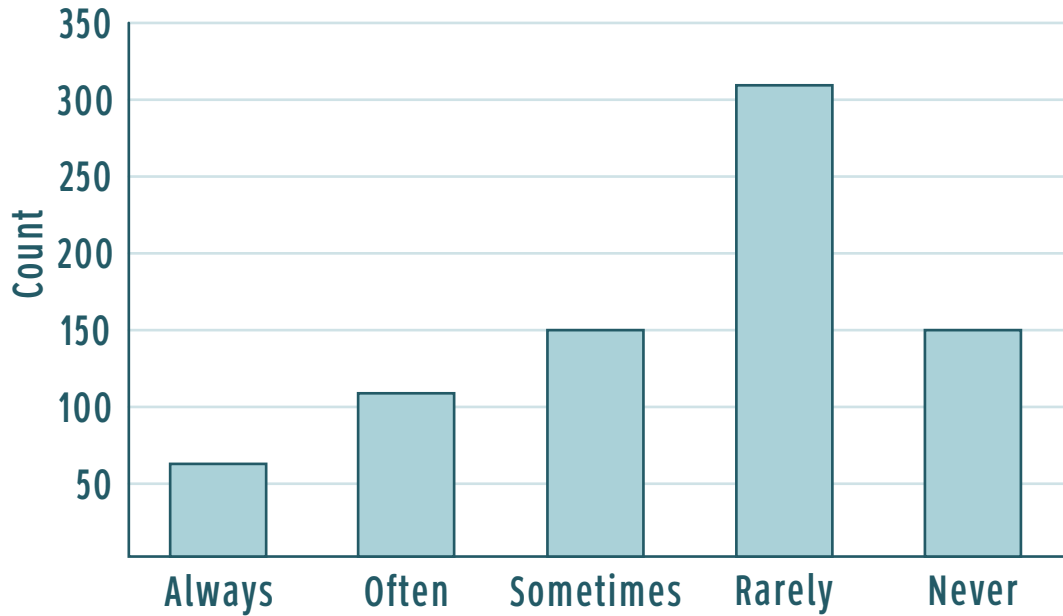


Figure 3.1: Percent Frequency of Obtaining Food from Convenience Stores by Ward

Percent Frequency of Obtaining Food from Convenience Stores by Ward

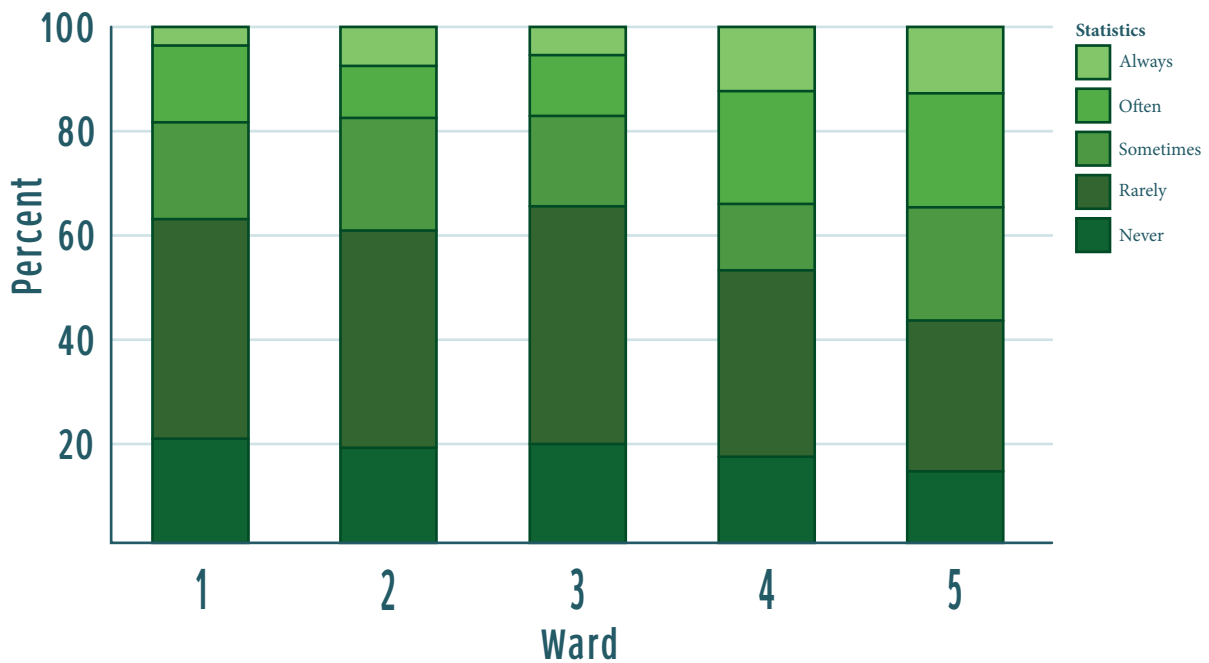


Figure 4: Frequency of Obtaining Food from Retail Stores with Food

Frequency of Obtaining Food from Retail Stores with Food

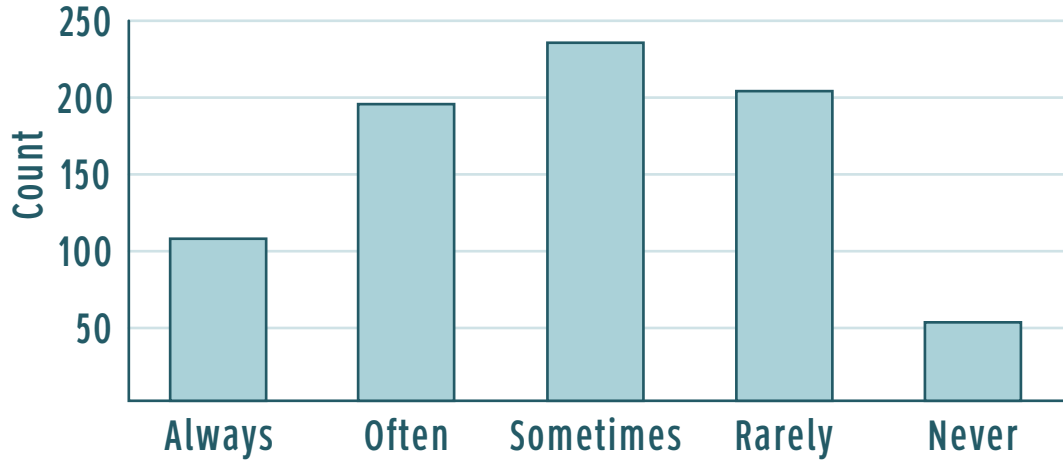


Figure 4.1: Percent Frequency of Obtaining Food from Retail Stores with Food by Ward

Percent Frequency of Obtaining Food from Retail Stores with Food by Ward

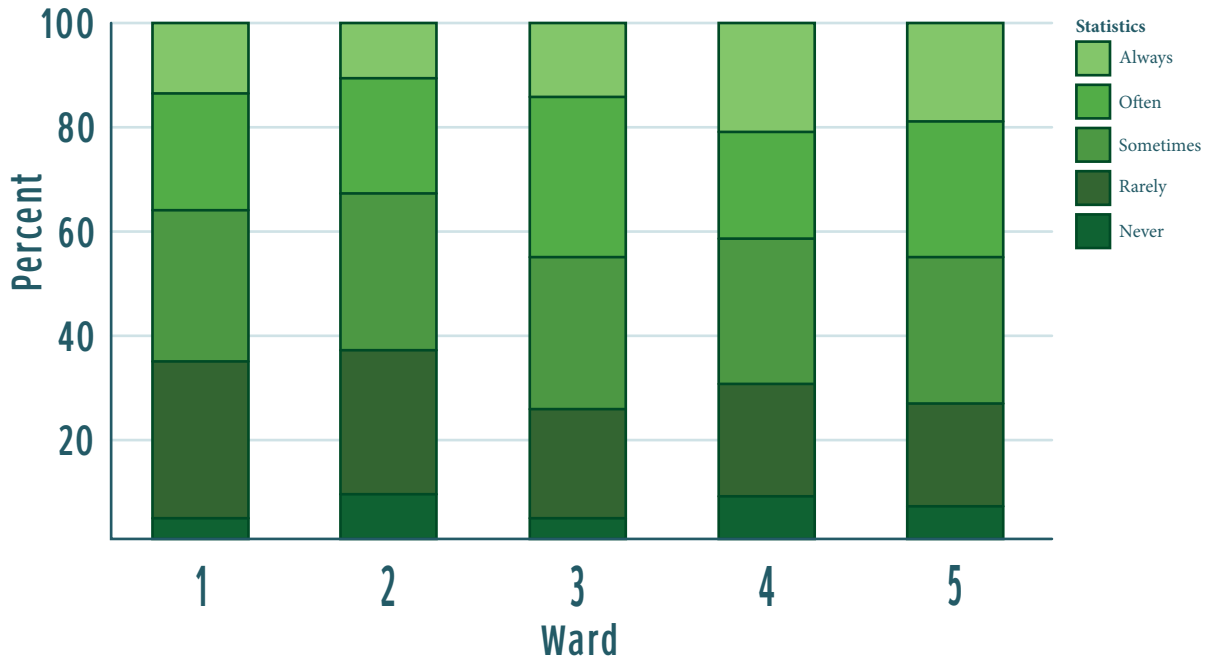


Figure 5: Frequency of Obtaining Food from Full Grocery Stores or Wholesalers

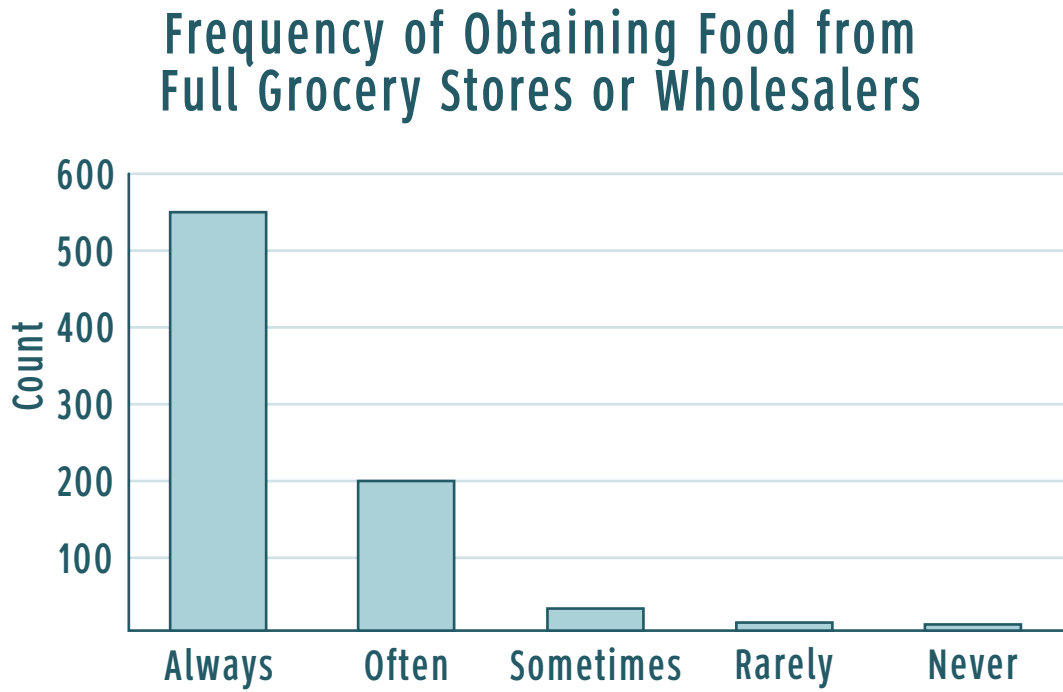


Figure 2.1: Percent Frequency of Obtaining Food from Small Vendors by Ward

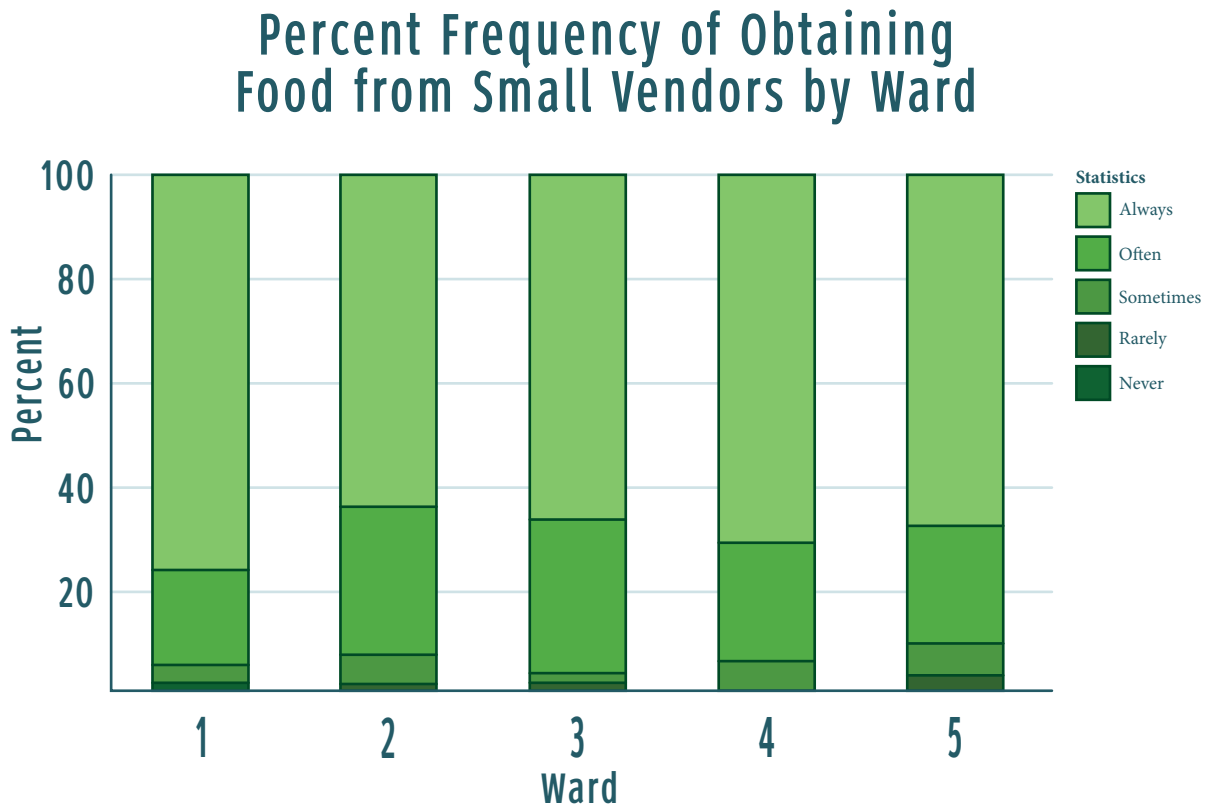


Figure 6: Frequency of Obtaining Food from Other Sources

Frequency of Obtaining Food from Other Sources

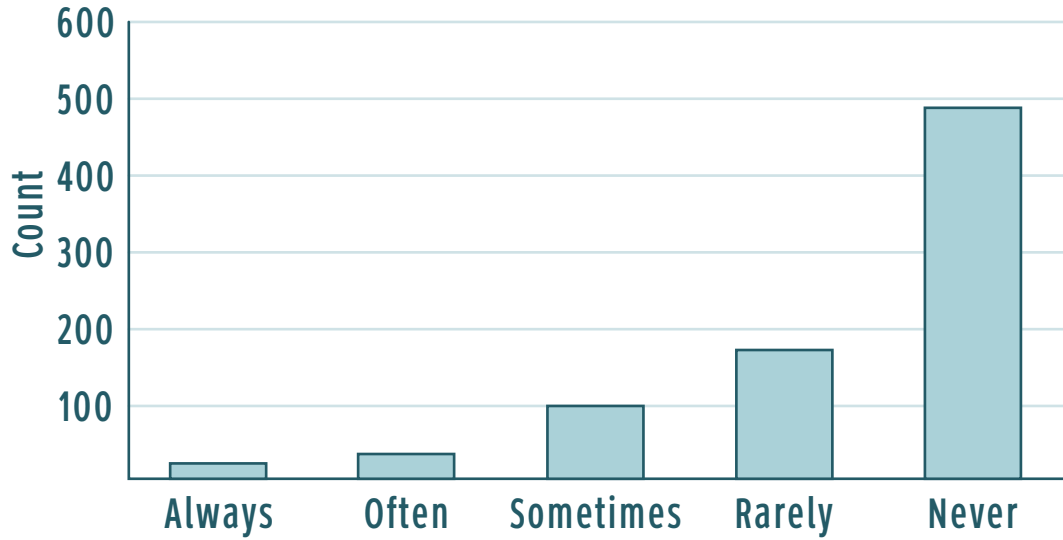


Figure 6.1: Percent Frequency of Obtaining Food from Other Sources

Percent Frequency of Obtaining Food from Other Sources

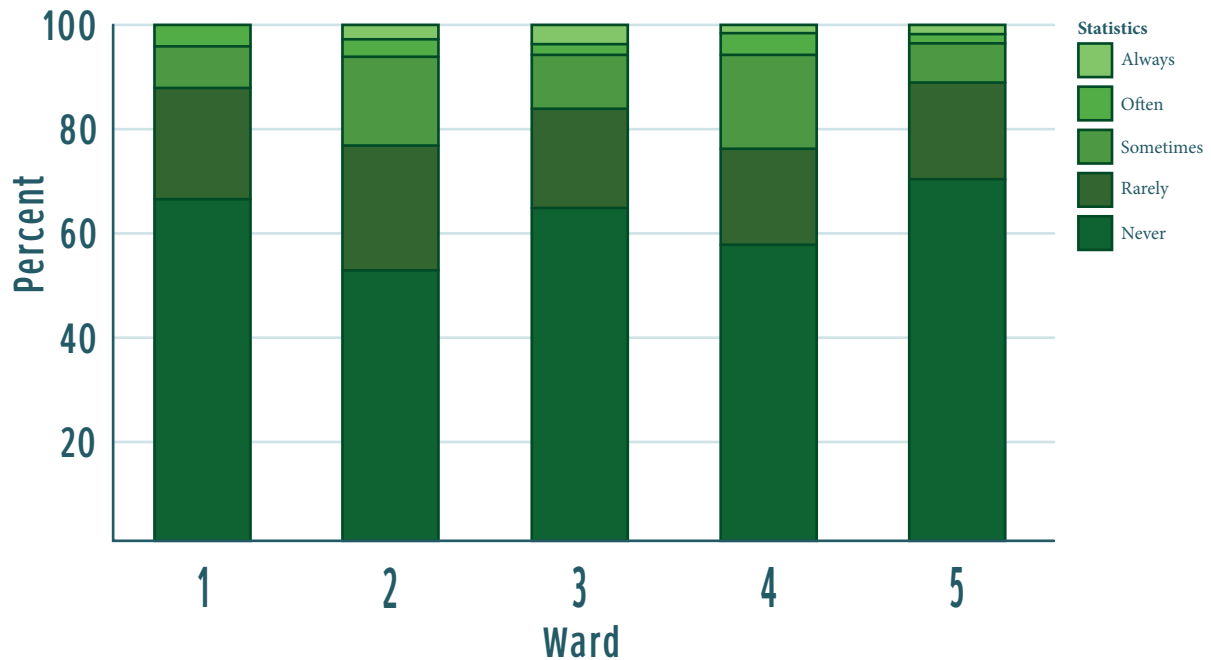


Figure 7: Frequency of Method of Transportation Used to Obtain Food

Frequency of Method of Transportation Used to Obtain Food

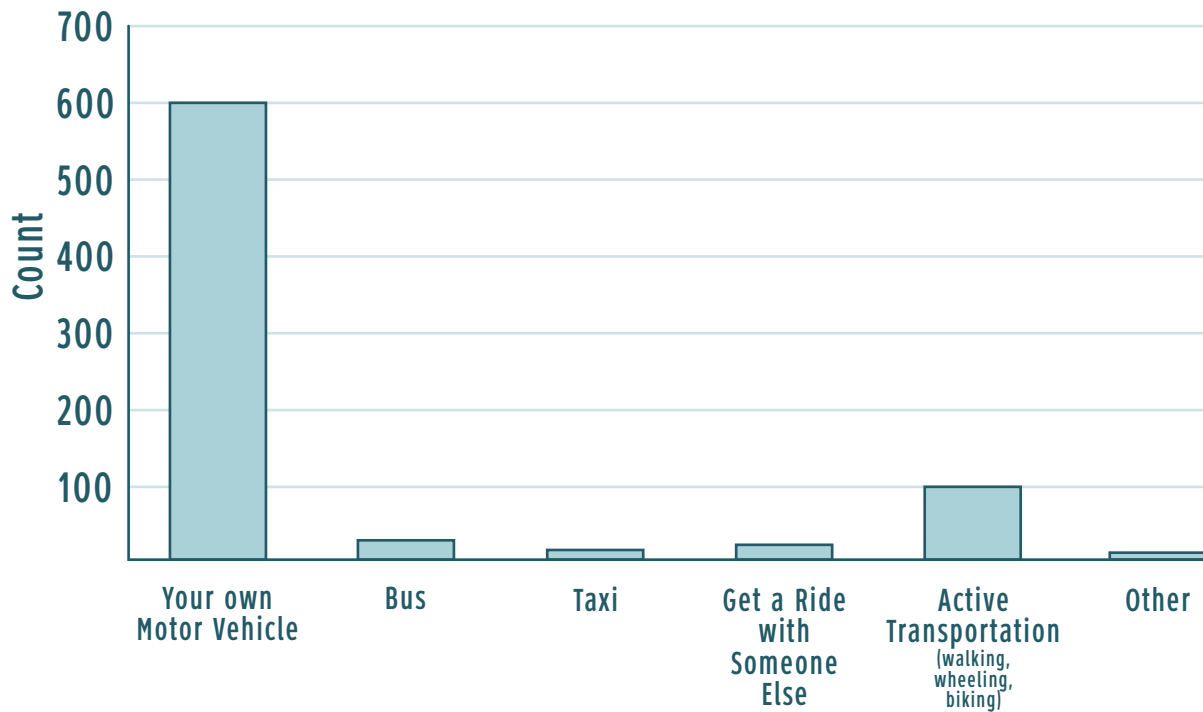


Figure 7.1: Percentage of Respondents by Ward Not Using Motor Vehicles to Obtain Food

Percentage of Respondents by Ward Not Using Motor Vehicles to Obtain Food

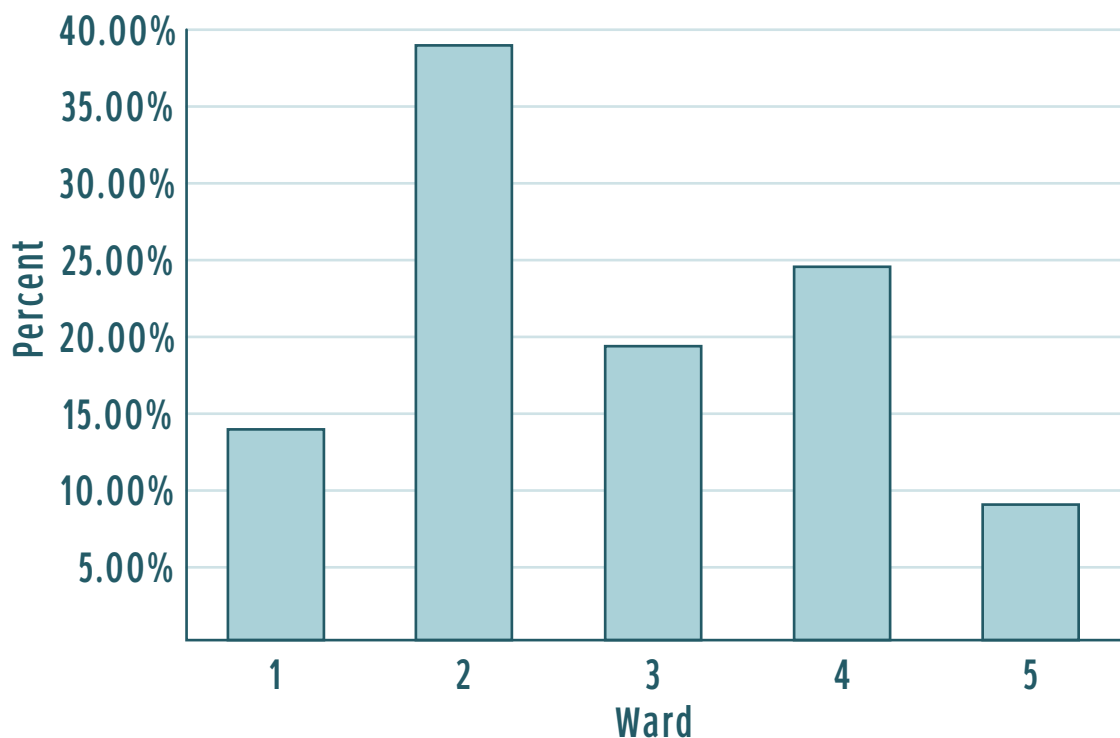


Figure 8: Overall Satisfaction with Food Obtainable in St. John's

Overall Satisfaction with Food Obtainable in St. John's

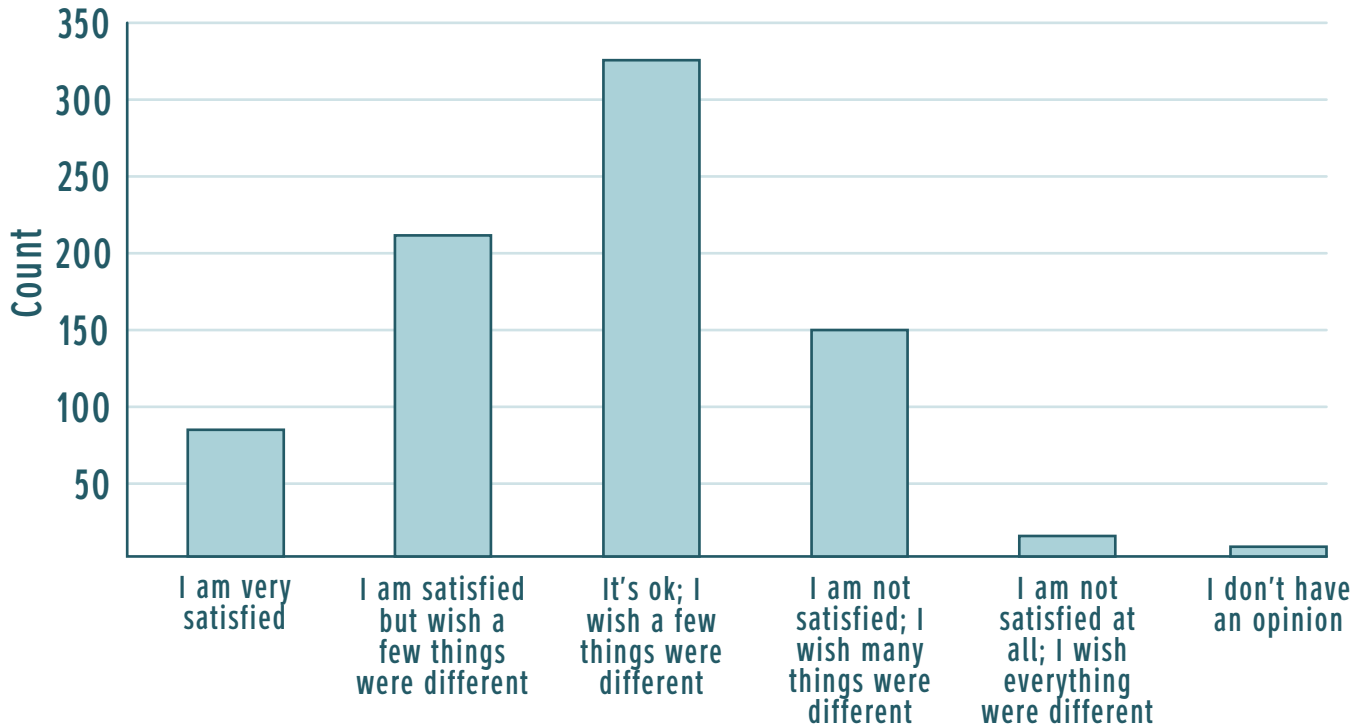


Figure 9: Ranked Importance of Changes Needed to Improve Food Access

Ranked Importance of Changes Needed to Improve Food Access

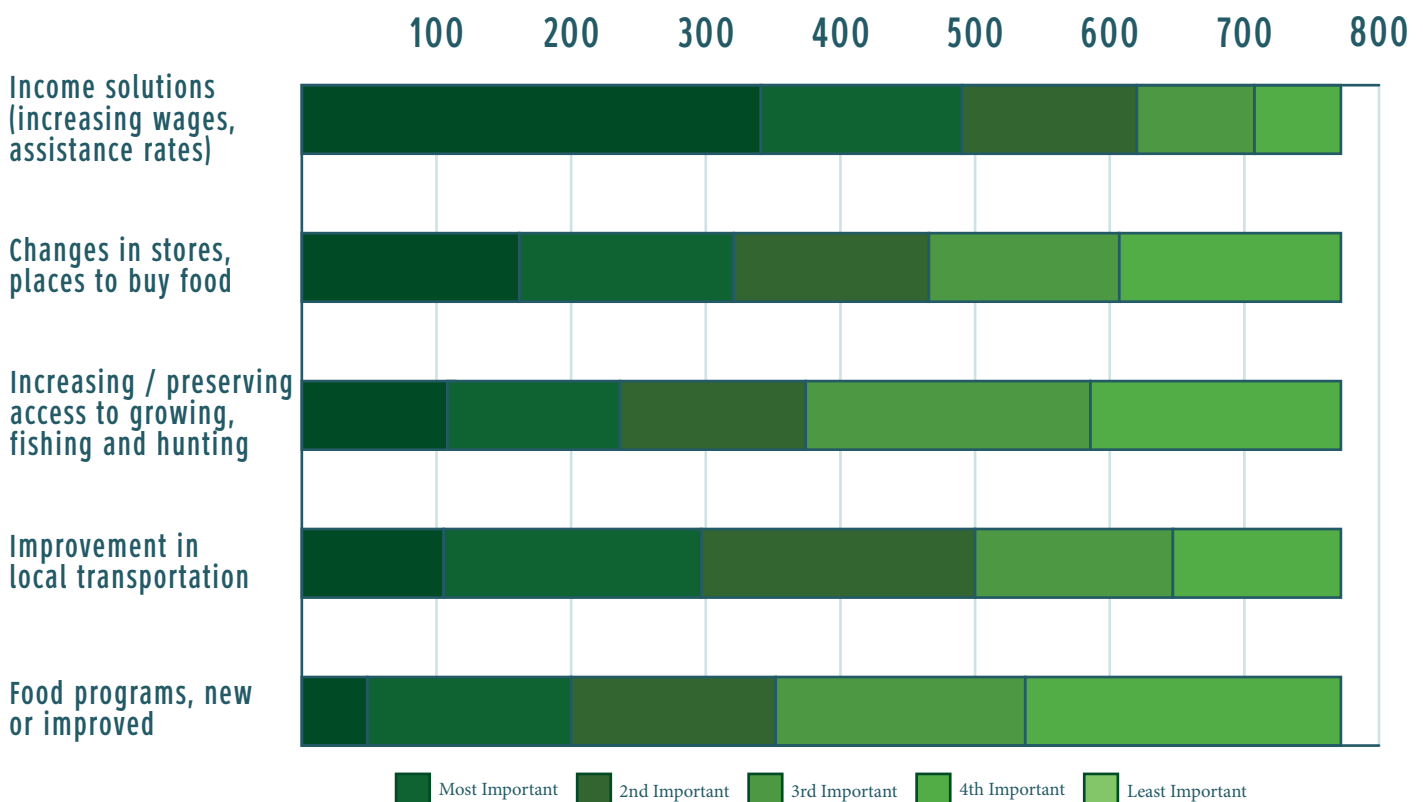


Table 3: Frequency of Food Activities Partaken by Households

Activities	Frequency
Picking wild foods (berries, mushrooms, medicine plants, etc.)	343 (42.8%)
Growing food at home	310 (38.7%)
Fishing (cod fishing, fresh water, other)	154 (19.2%)
Hunting (small or big game)	69 (8.6%)
Growing food at community or school garden	49 (6.1%)
Other: Maple tapping for syrup	1 (0.1%)

Table 3.1: Frequency of Food Activities Partaken by Households (By Ward)

Choices	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5
Learn what wild food is available, safe, or legal to harvest	50 (45.5%)	133 (46.2%)	55 (34.6%)	61 (45.2%)	39 (35.5%)
Learn hands-on skills	56 (50.9%)	148 (51.4%)	70 (44%)	69 (51.1%)	48 (43.6%)
Help in transportation	12 (10.9%)	60 (20.8%)	15 (9.4%)	22 (16.3%)	6 (5.5%)
Reduce costs (supplies, travel, materials)	36 (32.7%)	103 (35.8%)	49 (30.8%)	45 (33.3%)	27 (24.5%)
More connections and mentorship	32 (29.1%)	112 (38.9%)	48 (30.2%)	38 (28.1%)	29 (26.4%)
I am not interested in this	20 (18.2%)	47 (16.3%)	39 (24.5%)	27 (20%)	32 (29.1%)
Other: Access to space to grow food	1 (0.9%)	2 (0.7%)	3 (1.9%)	1 (0.7%)	0
Other: Having more time	2 (1.8%)	0	3 (1.9%)	1 (0.7%)	2 (1.8%)
Other	0	4 (1.4%)	1 (0.6%)	1 (0.7%)	0

Table 4: Frequency of Food Programs/Services Utilized by Households

Choices	Frequency
Food bank	80 (10%)
Drop-in meals	20 (2.5%)
Food vouchers from a group (Healthy Baby Clubs, Community programs)	19 (2.4%)
Meal and snack programs in schools	66 (8.2%)
Community programs such as gardens, cooking programs, or bulk buying clubs	49 (6.1%)
I use none	622 (77.6%)
Other	6 (0.7%)

Table 4.1: Frequency of Food Programs/Services Utilized by Households (By Ward)

Choices	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5
Food bank	6 (5.5%)	31 (10.8%)	21 (13.2%)	16 (11.9%)	6 (5.5%)
Drop-in meals	2 (1.8%)	9 (3.1%)	5 (3.1%)	4 (3%)	0
Food vouchers from a group (Healthy Baby Clubs, Community programs)	2 (1.8%)	6 (2.1%)	7 (4.4%)	1 (0.7%)	3 (2.7%)
Meal and snack programs in schools	14 (12.7%)	16 (5.6%)	11 (6.9%)	13 (9.6%)	12 (10.9%)
Community programs such as gardens, cooking programs, or bulk buying clubs	6 (5.5%)	25 (8.7%)	9 (5.7%)	7 (5.2%)	2 (1.8%)
I use none	88 (80%)	222 (77.1%)	125 (78.6%)	98 (72.6%)	89 (80.9%)
Other	0	3 (1%)	1 (0.6%)	1 (0.7%)	0

Table 5: Frequency of Choices for Enhancing Household Participation in Food Programs/Services

Choices	Frequency
Learn what is in my neighborhood	301 (37.5%)
Reduce cost to participate (supplies, travel, materials)	152 (19%)
Transportation	88 (11%)
More connections and mentorship	160 (20%)
I am not interested in this	383 (47.8%)
Other	7 (0.9%)

Table 5.1: Frequency of Choices for Enhancing Household Participation in Food Programs/Services (By Ward)

Choices	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5
Learn what is in my neighborhood	40 (36.4%)	116 (40.3%)	51 (32.1%)	60 (44.4%)	34 (30.9%)
Reduce cost to participate (supplies, travel, materials)	16 (14.5%)	56 (19.4%)	24 (15.1%)	38 (28.1%)	18 (16.4%)
Transportation	9 (8.2%)	38 (13.2%)	15 (9.4%)	20 (14.8%)	6 (5.5%)
More connections and mentorship	18 (16.4%)	71 (24.7%)	30 (18.9%)	25 (18.5%)	16 (14.5%)
I am not interested in this	54 (49.1%)	129 (44.8%)	88 (55.3%)	52 (38.5%)	60 (54.5%)
Other	2 (1.8%)	0	3 (1.9%)	1 (0.7%)	1 (0.9%)



For more information, contact:

Food First NL
44 Torbay Road, Suite 302
St. John's, NL
A1A 2G4



foodfirstnl.ca



[/foodfirstnl](https://www.facebook.com/foodfirstnl)



info@foodfirstnl.ca



[@foodfirstnl](https://twitter.com/foodfirstnl)



[\(709\) 237 4026](tel:(709)237-4026)



[foodfirstnl](https://www.instagram.com/foodfirstnl)