

# Home Grown Harvest: Guide to Mapping the Local Food Market in NWT Communities

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This guidance document was created as part of the *HomeGrown Harvest* mapping project carried out by the Aurora Research Institute thanks to funding from Tides Canada.

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May 2017

We would like to especially thank the Desnedé Farmers Market Association in Fort Smith for assistance with recruiting producers for the local food map study.



# Introduction

Northern communities have unique food security and food sovereignty needs that can be met by supporting local food production and local food markets. Collecting baseline information about the supply and demand needs of individual communities is one way to help producers make more informed decisions about their food production. The Aurora Research Institute has developed this guide to help NWT residents map local food production in their area to produce a visual representation of the local food market. The guide includes an example of a map that represents the state of the local food market in Fort Smith, NT during Summer 2016 until Winter 2017. The guidance document is designed for use by any interested organization or community member in the NWT who would like to:

- a) Find local food producers and vendors in the community;
- b) Identify the products that are available in the local food market;
- c) Explore consumer demand for locally produced foods;
- d) Estimate sales and market activity in the local food sector;
- e) Understand the barriers and supports available for local food producers;
- f) Consider how this information can be visually represented in a useful way.



For the purpose of this guidance document, *local food* is defined as food products grown or raised within the region being mapped (the area being mapped will be chosen by the user). The *local food market* is all the economic activity within the map area that relates to the exchange of local food for money. In the North, wild meat and fish are a critical component of the local food system. While users may wish to include locally harvested meat and fish in their mapping of the local food market, it can be very difficult to map how these wild foods impact the *local food market* because of policies surrounding the resale of wild meats in the NWT. Hunters and harvesters may not wish to share information about selling wild meats or fish, as it may be against the territorial regulations at this time. Users are encouraged to use caution when mapping regulated foods like wild meats. Other wild foods, such as plants harvested and processed for resale can easily be included in the map, for example, low bush cranberries baked into muffins or processed into jams.

This guide will be useful for communities and residents who want up-to-date information about the local food market that will help them successfully connect local food producers with consumers and develop more resilient local food economies in the North.

## Is this research?

In the Northwest Territories, **all research requires a research license from the Aurora Research Institute**. Some of the activities involved in the local food mapping process could qualify as research, particularly if you conduct interviews or surveys.

Before beginning a mapping project, contact the Aurora Research Institute for guidance on the licensing process:

The Scientific Services Office

P.O. Box 1450, Inuvik, NT, X0E 0T0

Phone: (867) 777-3298

E-mail: [licence@nwtresearch.com](mailto:licence@nwtresearch.com)

For more information, see the Aurora Research Institute website: <http://nwtresearch.com/licensing-research>

# Finding local food producers and vendors in the community

This section of the guide is designed to help identify local producers, recruit them, and set out the basic parameters of the mapping project. Thinking about what information you want to gather and how you will design the map will help ensure you are prepared to gather the necessary information accurately and effectively.

## *Who are the key players in your local food market?*

Communities in the Northwest Territories have vibrant and unique food systems that include imported foods, local foods, hunting and trapping, agriculture, grocery stores, farmers markets and home businesses. This guide is designed for mapping local food, but that could mean different things in different communities. Try to identify who the key players are in your local food market: who is growing their own food for sale? Which businesses (grocery stores, farms, large enterprises, gas stations) are selling food that they produced for themselves or for sale by local food producers? Where do friends, family and other community members buy food that was not imported from outside the community/region/territory? These questions will help you identify the food producers and sellers in your community.

Decide who will be included in the mapping. Will you map only licensed businesses or include folks who sell from home? Will you include those who sell baked



goods if their goods are made from store-bought foods, or only people who sell products made from locally sourced ingredients? Will you include wild harvesters and

## Choosing your map area

The first step in mapping the local food market will be defining the boundaries of your map area. When choosing a geographical area to map, consider the following:

**Your interest:** if you are a local food producer looking to map the market in your distribution area, you be interested in the geographical area that you sell within. If you are a funder or sponsor of local food production, you may be interested in the local food market activity within your jurisdiction only. Identify which area (or areas) interests you.

**Your capacity:** larger areas may have more sellers or a larger population, which will mean more data must be collected to populate the map. Alternatively, if your map area is too small, you may not be able to get an accurate sense of the food market or you may miss important market activities that are happening outside of your map area.

**Market activity:** you may need to plan your mapping boundaries around the market activities that are important to your community or region. Some of those activities may happen outside of the community, but may have real impacts on the market activity you hope to map. Be flexible about the map boundaries you have selected, in case you learn of local food market activity in a different area that you decide should be included in your map.

have you considered the confidentiality requirements that may apply when tracking unregulated sales of local meats and other foods? Keep in mind that you are not necessarily mapping all the economic activity for all *foods* in the community, but only those activities that represent the supply and demand of *local foods* (foods that are locally produced or harvested). You may need to ask specific questions about where the local grocery store gets its products or where a local food seller gets their ingredients.

In the example of the *HomeGrown Harvest* map of the Fort Smith local food market, the following criteria was used to identify a local food producer:



- i) A person or business that is growing, raising, gathering and/or processing local foods, and
- ii) A person or business that is selling their local food within Fort Smith and nearby settlements (including Bell Rock, Fort Fitzgerald, Salt River, etc.)

### *Recruiting key players to participate in mapping*

One advantage of the small size of most NWT communities is that the process of identifying producers is often simpler than in larger urban centres. There may be, however, people who have been producing and selling privately for years, but it is not common knowledge. Consider casting a wide net by making inquiries throughout many sectors of the local population and notifying key players in the local food market that you are looking for other local food producers, large and small.

## **Some valuable places to explore local food sales**

- If the community has a local farmer's market, speak with the organizers of the market and identify all the vendors selling farmed goods. Inquire with vendors whether there are other food producers they know of.
- Talk with the representative at the regional Industry Tourism and Investment (ITI) office who administers agricultural grants.
- Local restaurant owners often have working relationships with local farmers regularly purchasing staple foods such as potatoes, tomatoes, leafy greens and eggs.
- Privately owned grocery stores may carry a selection of locally produced foods during the high season.

In addition to making inquiries, it is helpful to advertise your project to ensure that people outside of your networks have the opportunity to participate. Prepare a poster that includes a description of the mapping project and why you are doing it. Note that you are looking to interview local food producers (and describe the criteria for being considered a local food producer), let them know the length of the proposed interview and how to contact you. Post the call on social media, circulate via e-mail to local



organizations who are likely to be in regular contact with producers, such as the regional Industry, Tourism and Investment (ITI) office, chamber of commerce, and farmer's market board. Hang up physical copies of your poster on message boards around the community. See Appendix A for the *Producer Recruitment Poster* used in the Fort Smith Local Food Map.

Not all local food producers will necessarily be eager to join in a study of their business practices and sales. It can be helpful to speak with people beforehand to explain the reason you are conducting the mapping project and the potential benefit to producers and the community. Consider whether producers would want their information kept confidential and how you might accommodate their wishes, particularly if your map area is small and you are mapping very specific details. Keep in mind that the success of a person's business may be something they feel is private, so while we hope that local business people and food producers will



be eager to share information that will be helpful to the local food sector, this topic may need to be handled with sensitivity.

# Identifying products available in the local food market

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This section of the guidance document provides advice for identifying local producers, designing interview questions to collect key information about their products and market activities, and conducting an interview. The information you collect from producers will be helpful for identifying what kinds of local foods are on the market, in what volumes, and where could there be gaps in the market that other producers may want to fill.

## *Asking the right questions*

Once you have identified and recruited participants, it is time to prepare for your interviews. Some examples of information you will need to collect from producers are:

- Where do producers sell their products? (eg. on the farm, farmers markets, grocery stores)
- What are they selling?
- How much of each product are they selling?
- Do they have plans to expand into other products?

Collecting this type of information will take some effort on the producer's part, as it means recalling specific numbers for each item they sell. You may choose to ask for their best estimate for sales and volumes for each product. Another option is to provide the question list to participants in advance of your interviews to allow them to come prepared with volumes and sales figures. Information about production volumes and sales can be collected in a couple of different formats: annual sales or actual volumes. The advantage of gathering product volumes in terms of annual sales will help ensure you get numbers that reflect the portion of the production that made it to market and was sold, instead of overall production numbers, which may not be an accurate picture of sales.

For examples of interview questions that gather the information noted above, please see Appendix C *Interview guide for producer interviews* for a list of sample questions.

## **Helpful tips for conducting interviews**

- Do a 'dry run' of the interview questions with a friend or family member to get used to how the interview will flow and to make sure your questions are easy to understand.
- Be friendly and polite, use plain language, and come prepared - bring pens, paper, audio recorders and other items you might need.
- Be sure to have the participant review and sign a consent form so that they can agree to the use of their information in the mapping project (see Appendix B for a sample consent form).
- Give the participant prompts and/or suggestions if they are struggling to answer a question.
- Be prepared to do some math. Have a calculator handy to help producers with converting production volumes into gross sales.
- Arrange for interviews with the producers you have recruited at a location that is convenient to you both.

### *Who are your participants and what are they producing?*

Food production activities in the NWT are diversifying. Livestock operations include chickens, goats, pigs and sheep. Growers are experimenting with aquaponics. Backyard growers are selling their surplus for a profit at farmers markets or selling value-added products like salsa, pickles, hot sauce, baked goods and made-to-



order food. This is the first type of information you will want to gather from your participants. This information is useful for all producers in the field, as it provides an inventory of available products that can be compared with consumer demand to assess whether the market for certain products is promising or saturated. Mapping this information is also valuable to consumers, who may be seeking locally produced products but not be aware of what is available.

One-on-one interviews are a great way to sit down with producers and talk about what they are producing and selling. Begin your interview by collecting some basic information about the interviewee's operation, including the approximate size of their business (number of people involved, sales figures) and length of time in the business. It can be helpful to categorize producers by their size and length of time in operation at the outset, so that later you can consider these factors when interpreting the information each participant has shared.

Next, work with the interviewee to make a list of all of the foods (fresh or value-added) they are producing for sale within the NWT. Be sure to specify your interest in *locally produced foods*, in case the producer also sells imported items. Prompt the interviewee if you are familiar with items or products that they might be

## Considering the time frame

The map you create will be a snapshot of the local food market at a particular point in time. You may speak with producers who have been selling local foods for many years, while others are brand new to the market. Producers may change their products each year, based on profitability, changes in business practices, popular trends or lessons learned. A business may have very different product types, volumes and sales in its first few years of operation that it does after becoming established.

With this in mind, it is often useful to set a time frame for producers to consider. Ask them about their most recent production season when determining which products they produce and in what volume. Be sure to also ask if this is typical of other years of operation. If there are specific barriers that prevented an interviewee from producing and selling a certain product during the year in question, consider whether to include that item, particularly if they intend to sell it again in the future. Sales figures from a previous year could be used to represent the potential for that product.

Interviewees may be eager to share sales figures and production volumes from past years, particularly very successful seasons, however it is important to be able to give a clear picture of the current food market, as that's the information that will be most useful to producers and consumers going forward.



forgetting about, especially seasonal items. Keep in mind that producers may not sell the same items every season – see the “Considering the time frame” box for more guidance.

When developing your producer interview questions, include a few questions that examine possible barriers that producers face. Ask them about things that stand in the way of expansion of operations, new products, alternate sales models, etc. This information is valuable for understanding external factors that may impact producers’ decisions about what to produce and how to sell. If barriers to local food market activities are an area of interest for you, consider speaking to *potential producers* – people who may wish to produce local foods, but who do not currently do so – to see if there are barriers preventing their growth in this sector.



Once you have completed the interviews with producers, you will have collected important data about the kinds of products available in the local food market, the volume of each product that is available and the value of those products. This is a snapshot of the current local food market, its successes and opportunities. Be sure to keep the information that participants shared with you safe and remove any references to specific persons or businesses, if you promised to do so. This information will be analyzed in the *Understanding Market Activity* chapter.



# Exploring consumer demand for locally produced foods

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This section provides advice for collecting and mapping the purchasing habits and demand among local consumers. This information can help producers to identify gaps in production and methods for improving marketing strategies. In most communities, surveys are a great way to get input from the general public – you can collect a great deal of information from a wide variety of people to create a snapshot of consumer demand.

## Survey Considerations

**Online survey programs:** There are several useful online survey-creating programs available on the internet. They often come with guidance for developing surveys (it can be harder than you think!) and built-in analysis functions, like exporting data directly to spreadsheets. It may be more convenient for some participants to fill in the survey online, while for others it may be a barrier. Think about who your participants are and what might work best for them.

**Question design:** Survey questions should offer participants the opportunity to answer the question and not limit them to answers the survey designer thinks they would give. Questions can be designed as open-answer, where participants can write their own unique response, or the survey designer can try to provide all possible answers and ask the participant to “choose all that apply” or “choose only one” (in “choose only one” cases, it is important that the survey designer work hard to cover all possible responses, not just those that are most expected, and include answers like “other” or “not sure” to cover anything you have not thought of.) Other questions may include *Likert scales* which ask respondents to rate their feelings about something on a scale. Whatever question/answer format you choose, be sure to include clear instructions. If participants cannot easily and clearly answer each question, your survey may not produce accurate information.

## *Who are your local consumers?*

In many communities in the NWT, any community member could be a local food consumer. Most mapping projects will want to survey as many people from the community as possible, from all walks of life. Some basic criteria for survey-takers should be:

- Over the age of eighteen (so that they can legally consent to sharing their information), and
- A community member in the region being mapped.

The same recruitment strategy suggested in the previous section can be used to find community members to fill out the consumer survey: post on social media, send out to local organizations and post on local community boards. If your survey is available online, post and share the link. If participants need a paper copy, give them your contact info or distribute copies. Include a consent form at the start of online surveys or as an attachment to paper copies (see Appendix B for an example).

## *Asking the right questions*

A survey of consumers can answer several important questions: What are community members’ local food purchasing habits? Are they aware of the local foods available in the community? What information do consumers need to participate in the local food market? What local foods do people in the community want to buy? How much would they buy if these products were available? What are consumers’ attitudes towards local foods? What motivates consumers to buy local foods?

Creating a survey can be challenging. Spend some time thinking about the specific information you would like to collect. One important piece of information is *what* consumers want to buy. You can ask this question in an open-ended way, for example: “What local foods would you like to see being sold in your community?” Participants can answer with a list of things they would like to buy. This method will leave you with a very large list of products and you will need to note each product and how many people mentioned it to get a sense of how popular a particular product would be. If you have a large number of survey participants, it may be challenging to analyze the final results (it can be overwhelming to analyze 300 people’s lists of preferred products!) For larger groups of respondents (20-50 or more), you may wish to use a Likert scale in your question and an online survey with built-in analysis function to automatically organize and categorize your respondents’ answers. For more guidance on designing your survey, see the *Survey Considerations* box on the previous page.

It may be helpful to break down your questions about food preference by *food type*. You can ask participants to indicate yes or no, ask them to choose how strongly they feel about each food product, or ask them how much of/how often they would buy each product. You may not be aware of all the potential food products that consumers may want, so there is a risk of missing some products. Be sure to include an open-ended question like, “Are there other local foods that you would be interested in buying that have not been mentioned?” to capture anything consumers might like to add. You may wish to ask about which specific foods consumers are *currently* buying AND what they *wish to buy*. This will demonstrate first, what the current market activities are and, second, what the potential for growth in the market.

## Recruitment, respondents and bias

To get the most accurate and valuable information about local producers and consumers, you will want to aim to include a wide variety of folks in your data collection. This will help you avoid *bias*. It may be easy to talk friends and family members into participating in surveys and interviews, but if you only collect information from people close to you, you may be missing out on answers from people you have never met and who may have very different ideas about local food.

Make it a goal to include many different community members in your mapping project, including lifelong residents, people new to the community, people who eat traditional foods, people who have very little access to traditional foods, people who grow their own food, people who only buy their food, people who love healthy foods, people who love to eat at restaurants, people who work full time, and people who do not have jobs. Make sure you are including people of all genders and age groups (over the age of 18) – these and many other factors will influence how people feel about local foods and your goal should be to get as many different perspectives as possible.

Also, consider your recruitment methods – how will you get to all of these different populations in the community and encourage them to participate? Often friends, family and people who are used to volunteering are the most likely people to participate in our surveys. Consider how this might skew your information and think about ways to include people who might not usually be interested in completing a survey.



After establishing what customers buy *now* and what they *would* buy (if they had the opportunity), it may be useful to develop an understanding of how the consumer engages with the local food market. Asking consumers where they purchase local foods, or where they would prefer to purchase local foods when they become available, can provide important information about whether consumers are aware of local foods that are available in the community and which points of sale would be most profitable for producers. Think about other questions you may have about

consumers' purchasing behaviours – producers could benefit from information that helps them adjust their production methods, pricing, marketing strategies, and/or sales techniques. To ensure the information is only being collected from consumers in the map area, include a question at the beginning or end of the survey asking the participant to confirm that they live/work/operate within the region or community selected.

One key area that may interest you is consumer attitudes towards local foods. Do consumers generally support local food production? Do they value it more/less/equal to store-bought foods? Do they expect local foods to be more expensive to purchase? Do they think any extra cost is justified? Do they understand the benefits of local food production? For examples of survey questions seeking the kinds of information described in this section, please see the *Consumer Survey Example* in Appendix E.



# Understanding market activity in the local food sector

If you have completed producer interviews and consumer surveys, you will have collected a wealth of information about the local food market. This section provides advice to help you organize the information you have collected and analyze it so it will be useful for mapping.

## Analyzing the data

Spreadsheets are a handy tool for organizing the information you have collected. Producers have provided you information about each product they sell and how much they sell. They may have also provided you with information about how much money they make, either per product or in total. By inputting this information in to a spreadsheet, you will be able to compare the information to see which products are most successful, identify trends in the market, and generate charts and graphs to display this information. To map producer data, first focus on

establishing which products are on the market, how much of each and what percentage of the market each product has captured. This provides an indication of the popularity of each item, as in the example in the *Market Share Chart* below.



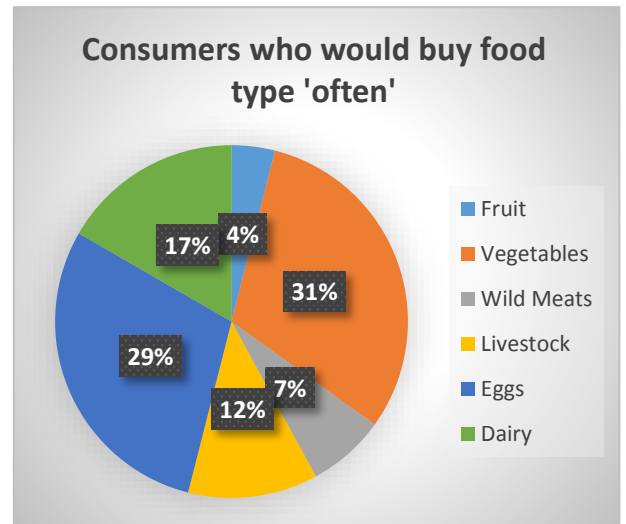
## Market Share Chart

	Products						Gross Sales
Producers	Carrots	Cucumbers	Greens	Pickles	Pesto	Potatoes	
One	\$800	\$1000	n/a	n/a	n/a	\$3000	<b>\$4,800</b>
Two	n/a	n/a	\$500	n/a	n/a	n/a	<b>\$500</b>
Three	n/a	n/a	n/a	\$350	\$75	n/a	<b>\$425</b>
Four	\$430	\$720	\$300	\$800	\$180	\$1200	<b>\$3630</b>
<b>Total</b>	\$1230	\$1720	\$800	\$1150	\$255	\$4200	<b>\$9355</b>
<b>Market Share</b>	<b>13%</b>	<b>18%</b>	<b>9%</b>	<b>12%</b>	<b>3%</b>	<b>45%</b>	

If you used an online survey program for the consumer survey, you may be able to automatically export participants' answers to a spreadsheet for easy analysis. You will want to tally how many people in the community expressed demand for each product and generate an idea of which products are most in-demand. You can do this for the more general food categories, as in the *Consumer Demand by Food Category Chart* below, but you will definitely want to do this for the specific products, as in the *Consumer Demand for Leafy Greens Chart* example, also below.

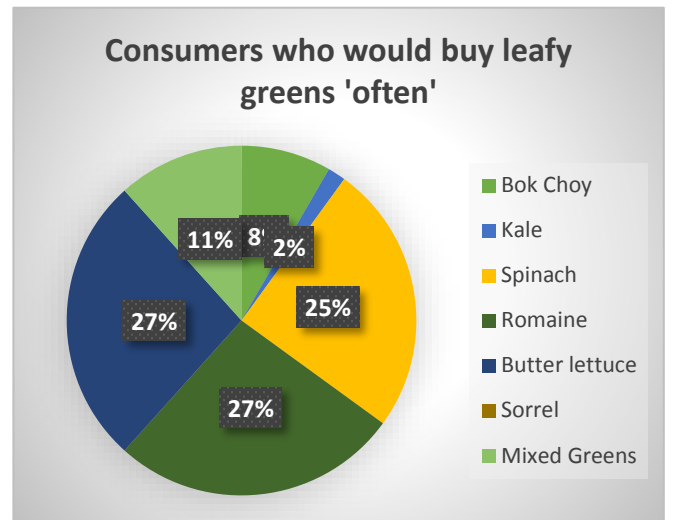
**Consumer Demand by Food Category Chart**

Product	Often	Sometimes	Not at all
Fruit	5	23	25
Vegetables	39	14	0
Wild Meats	9	19	25
Livestock	15	28	10
Eggs	37	11	5
Dairy	21	23	9



**Consumer Demand for Leafy Greens Chart**

Product	Often	Sometimes	Not at all
Bok Choy	5	0	11
Kale	1	10	5
Spinach	15	0	1
Romaine	16	0	0
Butter lettuce	16	0	0
Sorrel	0	0	16
Mixed Greens	8	8	0



These analysis processes should demonstrate where there is opportunity in the market: are there products that consumers demand which are not being sold by producers? Are there products that are being sold but not in quantities large enough to meet consumer demand? Are there products being sold for which there is not sufficient demand?



Take some time to consider the other trends that may exist in the data you have collected. Compare the sales data and consumer demand information with feedback producers have shared about their success and progress. Producers in Fort Smith, for example, reported great sales margins for value-added foods made from raw ingredients they have grown. Another trend was product specialization; specifically, creating a name for oneself by producing and supplying a particular product of exceptional quality year after year.

Consider whether you would like to map the geographical location of producers and consumers (this will depend on the size of your map area and whether you think location is an important factor in your region).

## Analyzing producer barriers

You may have gathered some information about the barriers facing producers who wish to expand their business, increase their sales or from others who are facing barriers to starting a business. Look for trends in participant responses – were there certain barriers that impacts multiple producers, or were the barriers different for each individual? You may choose to do extra research to determine if the barriers described by participants are truly preventing market activity, or if participants may be missing important information that would help them navigate the proposed barrier.

Some examples of barriers facing local food producers in Fort Smith are:

**Bylaws:** current bylaws about livestock are a barrier for producers, depending on where their operation is located, preventing them from expanding into animal-based food production.

**Regulation:** Local producers expressed positive experiences working with officials and inspectors to ensure permits and permissions are in place. Some producers feel regulations are too lax, allowing for lower standards of cleanliness and safety. Regulations against selling locally caught wild meats has been identified as a barrier to expanding the market for hunters and wild meat processors.



# Considering visual representation

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If you have been following the instructions and guidance in the previous sections, you should have some pretty valuable information about the local food market on your hands! This final section of the guide will provide some useful advice for how to create a visual map of the information you have collected.

## *Why map the data?*

This information is useful on its own, even without being mapped in a visual way. Creating a map of the data is valuable because it can inspire viewers to think about the data – the information about market activity, demand, opportunities and barriers – in new ways that may help them expand their business and encourage growth in this sector. For many people, reading and understanding a report about the economic activity occurring in the local food market is difficult, boring and time-consuming. A map provides a visual aid that can be quickly understood and is accessible to more people. After collecting such valuable information about the local food market, it is important to be able to share that information with local food producers, potential producers and consumers to ensure the economic opportunities and benefits of the project reach as many people as possible.



## *What information needs to be mapped?*

The best expert to decide which key information should be mapped is you! After having collected and analyzed data from the community, you should have significant and valuable knowledge about the local food market that is ready to share. What struck you as important as you were collecting the data? Were there key successes or barriers that seemed to have a big impact on the food market in your community? Were there

interesting trends in the market activity that you think producers and consumers should know about? Try mapping the relationship between what products producers are making available and what products consumers are demanding. This information will demonstrate to producers where there is opportunity to expand their production into higher demand areas. You may also wish to map producers geographically, particularly if you found that consumers are not aware of the locally produced foods that are available in the community or do not know where to buy them. In the map of Fort Smith's local







food market activity, we used circles of differing size and colour to show the amount of each product being sold compared with the amount of each product that consumers reported wanting. The map shows a lot of demand for vegetables, particularly carrots, leafy greens, tomatoes, and corn (the top four in-demand items), but the producers sales demonstrate that they are producing and selling potatoes, cabbage, carrots and squash most often. There is an opportunity here for producers to expand production of the most in-demand produce.

The *HomeGrown Harvest* map mapped the local food system in Fort Smith, starting with the supportive and restrictive factors that influenced local producers (eg. land, water, by-laws) and consumers (health, cost accessibility). We then followed the food that was produced, plotting its path to market and demonstrating the potential markets it might end up in – producers sell most of their products are the local farmer’s market or in community-supported agriculture programs. Some also sold at their own farms, and much fewer sold to local grocery stores and restaurants. We also included the marketing methods that local producers used to promote their products to consumers. Facebook posts were the most popular, followed by word of mouth. Very few posted advertisements locally.

On the consumer side of the map, we plotted the demand that local consumers reported in the *Consumer Demand Survey*. Demand was broken down by food category first, with most consumers expressing a demand for locally grown vegetables. They specified several varieties that they would purchase “often” if given the opportunity. Next,

consumers reported a demand for locally raised meat – chicken and bison specifically. Wild meats were in moderate demand – we expected there to be very high consumer demand for wild meats, given their cultural significance in the community and popularity, however it is possible that consumers who filled out the survey were not thinking of wild meats as “local foods”, and therefore did not list them (a lesson learned when providing survey instructions to participants!) There are some demand for local eggs, fruits and dairy as well.



### *How to create the map*

There is no *right way* to map the information you have gathered. How you map it will depend on what information you collected and how you want to illustrate the relationships you have uncovered. Once you have decided on the details of your map, there are a few different options for designing your visual:

**Draw it by hand:** You may want to create your map by hand – you can draw it yourself or contract an artist to design it for you. This method provides you lots of flexibility in how you map your data

**Standard computer programs:** Word processing programs like MS Word and free drawing programs like Paintbrush come standard on most computers. You may be able to use the features of these programs to design a map that shows the key variables and relationships you want to plot.

**Graphs:** Some graphs may be helpful for mapping certain types of relationships, particularly line graphs, scatter plots and combination graphs.

**Online mapping applications:** There are several online applications for mapping systems, relationships and data, including Kumu, Mind Node and MindJet. Some are free, others require a purchase, either for the whole product or for a more advanced version. We used Kumu to create the *HomeGrown Harvest* map on the following page.

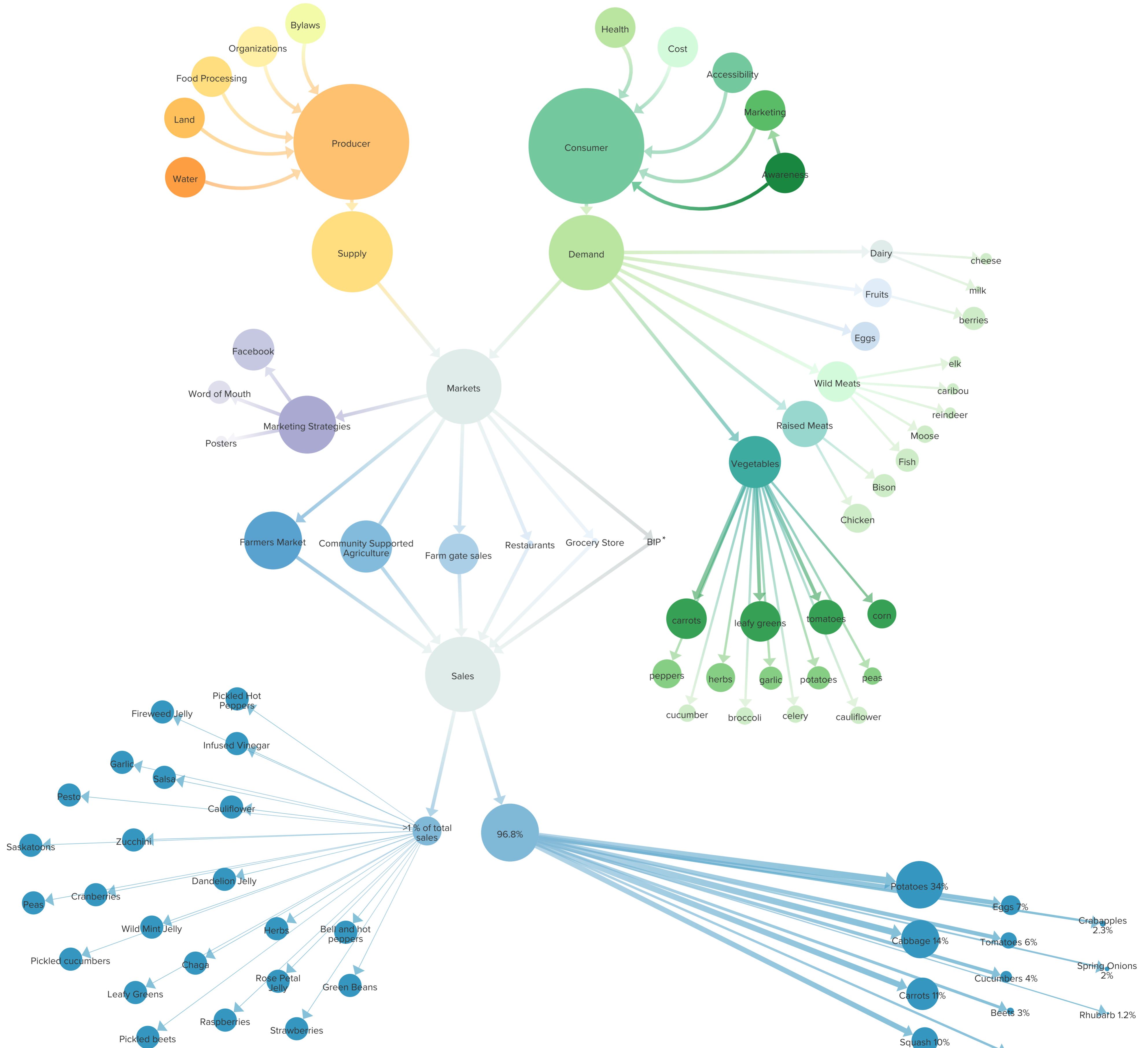
## **That's it – Happy mapping!**

This concludes the food mapping guidance document. On the following pages, you will find the *HomeGrown Harvest* map of Fort Smith's local food market during 2016. If you are designing a mapping project and would like assistance, feel free to contact the Aurora Research Institute for resources and advice.



# HomeGrown Harvest: Map of Fort Smith's Local Food Market

## 2016 Growing Season



\*Business Improvement Programs

## Appendix A: Producer recruitment notice

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### **PARTICIPANTS NEEDED FOR RESEARCH ON LOCAL FOODS**

We are looking for volunteers to take part in a study of  
*local foods*.

Do you grow, harvest or produce food in **insert region**? Do you sell the food you produce locally, or wish that you could? Join us to share your experience with producing local foods and help us map out the local food activity happening in our town.

As a participant in this study, you would be asked to: *complete an informal interview that will take approximately 60 mins*.

For more information about this study, or to volunteer for this study,  
please contact:

**Insert Contact Name**  
***Insert organization's name***

at

**Insert phone number**  
Email: ***insert e-mail address***

Note: If you know a local food producer who would like to contribute to the study, but who will need a translator as they do not speak English, please let us know. If you would like to volunteer to translate, please contact us.

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# Appendix B: Example information sheet and consent form

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**Project Title [feel free to be creative]: Mapping Local Food Production in *[insert town]*, NT**

**Contact Person:**

*[Name and contact info]*

## Purpose of the Research

Communities across the North are producing food locally, creating new economic opportunities and improving the quality of food available to community members. *[Insert organization or main contact name]* is collecting important information about interest in locally produced food in *[insert community/region]*. *[optional: add a description about the town and its successes/barriers to local food production]* Producers are in need of market information inform their business decisions and encourage growth in their businesses, the community and local food in the NWT.

To collect this information, we will carry out interviews with local food producers and potential local food producers, and use the information collected to develop a visual map of Fort Smith food production sector. We are interviewing anyone who produces food for sale (including growing, gathering, processing local foods, etc) in *[insert town/mapping area]*, including people who are not currently selling, but who would like to. You are invited to participate in an interview to share your experience producing and selling local foods in *[insert town/mapping area]*. Interviews will take approximately one hour and will be conducted at a location we both agree to.

Your participation in this study is voluntary. You may decide not to be in this study, or you may choose to change your mind about participating at any time. You may leave the study at any time without affecting your relationships with any of the people involved. You may refuse to answer any question you do not want to answer by saying “pass”.

### **Withdrawal**

You are free to withdraw from the study at any time – that means you can inform the researcher that you do not wish to participate at any time. If you wish to withdraw after the interview is complete, please be aware that you will not be able to withdraw the information you have shared.

### **Potential Risks, Harm, Discomforts or Inconvenience**

There is no known harm or risk associated with participation in this study.

### **Confidentiality**

The information you share will be kept strictly confidential. All notes and transcripts will be kept on a password protected computer and any personal information about you will be removed. We will not include any information in any report we may publish that would make it possible to identify you.

### **Translation**

If you know a local food producer who would like to contribute to the study, but who will need a translator as they do not speak English, please contact *[insert organization or main contact name]* and we will do our

best to find a translator. If you would like to volunteer to translate, please contact *[insert organization or main contact name]*.

**Ethics and Research Licensing *[if applicable]***

This research has been reviewed and approved by the Aurora College Research Ethics Board and has been licensed by the Aurora Research Institute. If you have any questions about the process, or about the rights of the participant in the study, you may contact:

Aurora College Research Ethics Committee  
Manager, Research Ethics  
Aurora College  
Phone: 867-872-7084  
Email: [REC@auroracollege.nt.ca](mailto:REC@auroracollege.nt.ca)

Aurora Research Institute  
Office of Scientific Services  
Licensing Coordinator  
Phone: 867-777-3298  
Email: [licence@nwtresearch.com](mailto:licence@nwtresearch.com)

## *Consent Form*

By signing this form, I agree that:

The study has been explained to me.

All my questions were answered.

Possible harm and discomforts and possible benefits of this study have been explained to me.

I understand that I have the right not to participate and the right to stop at any time.

I understand that there will be no consequences for me if I refuse to participate.

I have the choice of not answering any specific questions that I choose not to answer.

I am free now, and in the future, to ask any questions about the study.

I have been told that my personal information will be kept confidential.

I hereby consent to participate in this study:

Name of Participant: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix C: Interview guide for Producer interviews

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Sample questions (do not have to be asked exactly this way, but raised as part of the ongoing conversation). The interviewer will prompt interviewees for more details based on their knowledge of the local food market.

1. How long have you been producing and selling food in the community?
2. What is the size of your operation?
  - a. How many people are involved, including yourself and any other employees?
  - b. What is your total annual sales?
3. What are you currently producing?
4. Can you estimate this year's annual sales of each product?
5. Where do you sell your products?
6. Can you list the marketplaces you sell at?
  - a. At which of these markets do you make the most sales and at which do you make the least?
7. How do you market your products?
  - a. Which places do you advertise most frequently? Where do you advertise least often?
8. What are the reasons you have been successful?
9. What challenges have you faced selling your products?
10. Is there anything else you think I should know about local food production in this community?
  - a. Any additional comments/ideas/suggestions about local food production you would like to add?

### Potential Producers

1. What food-related product(s)/services do you hope to offer or would you like to offer, if you could?
2. Can you foresee any barriers to the implementation/success of your venture?
  - a. Are there any barriers preventing you from starting your business now?
3. Is there anything else you think I should know about local food production in this community?
  - a. Any additional comments/ideas/suggestions about local food production you would like to add?



# Appendix D: Online consent form

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**\*\*If possible, add this text at the beginning of an online survey or questionnaire\*\***

You are being invited to participate in a mapping project titled *[insert title]*. This project is being done by *[insert organization or main contact name]*. This survey is open to all residents of *[insert mapping area boundaries]*

The purpose of this project is *to gather information about the kind of local foods that community members would like to see being sold in [insert region]*. If you agree to take part in this study, you will be asked to complete an online survey/questionnaire. This survey/questionnaire will ask about *the local foods that you and your family like and would buy* and it will take you approximately 10-15 minutes to complete.

You may not directly benefit from this project; however, we hope that your participation may *help encourage local food producers to produce and sell foods that you have identified*.

We believe there are no known risks associated with this project; however, as with any online related activity the risk of a breach of confidentiality is always possible. The survey is anonymous and we ask that you do not include any personal information.

Your participation in this study is completely voluntary and you can stop taking the survey at any time.

If you have questions about this project or if you have a research-related problem, you may contact *[insert name]* at *[insert phone number]* or *[insert e-mail address]*.

By clicking "I agree" below you are indicating that you are (1) at least 18 years old, (2) have read and understood this consent form and (3) agree to participate in this research study. Please print a copy of this page for your records.

I Agree

I Do Not  
Agree

## Appendix E: Consumer Survey Example

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Q1. I am interested in purchasing the following locally produced foods:

Product	Often	Sometimes	Not at all
Vegetables			
Fruits			
Dairy			
Eggs			
Meat			

Q2. I am interested in purchasing the following locally produced proteins:

Livestock*	Often	Sometimes	Not at all
Beef			
Chicken			
Eggs			
Pork			
Fish			

\*This list is abbreviated. Amend or add products as needed.

Q3. I am interested in purchasing the following locally produced leafy greens:

Leafy Greens*	Often	Sometimes	Not at all
Bok Choy			
Kale			
Spinach			
Romaine			
Butter Lettuce			
Sorrel			
Mixed Greens			

\*This list is abbreviated. Amend or add products as needed.

Q4. In am interested in purchasing the following locally produced herbs:

Herbs*	Often	Sometimes	Not at all
Basil			
Cilantro			
Parsley			
Sage			
Dill			

\*This list is abbreviated. Amend or add products as needed.

Q5. I am interested in purchasing the following locally produced vegetables:

Vegetable*	Often	Sometimes	Not at all
Beans			
Beets			
Broccoli			
Cabbage			
Carrots			
Cucumbers			
Eggplant			
Tomatoes			
Potatoes			

\*This list is abbreviated. Amend or add products as needed.

Q6. I am interested in purchasing the following locally produced fruits:

Fruit*	Often	Sometimes	Not at all
Strawberries			
Raspberries			
Haskaps			

\*This list is abbreviated. Amend or add products as needed.

Q7. Where do you purchase locally produced foods?

Market*	Often	Sometimes	Not at all
Grocery Store			
Farmer's Market			
Directly from the Farm			

\*This list is abbreviated. Amend or add products as needed.

Q8. How do you find out about where to buy locally produced foods?

Advertising*	Often	Sometimes	Not at all
Social Media			
Town website			
Local Bulletin Boards			
Word of Mouth			

\*This list is abbreviated. Amend or add products as needed.

Q9. How do you feel about locally produced foods?

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Agree	Don't Know
I am willing to pay more for locally produced foods than I would for a similar product that's not local.						
Locally produced foods are more affordable than similar products that are not local.						
Local food production is better for the environment.						
I make a point of purchasing locally produced foods in my community.						
Locally produced foods are healthier than similar foods that are not local.						
Locally produced foods are expensive.						
The quality of locally produced foods is better than similar products that are not local.						
I support local food producers because it is good for the local economy.						
Locally produced foods are widely available in my community.						
Purchasing locally produced foods in my community is not convenient.						
I wish there was a greater variety of locally produced foods in my community.						

Q6. Do you live in *[insert region]*?