



The Economic Impact of Local Food Procurement by Institutions

Northlands

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Executive Summary

Northlands engaged Nichols Applied Management (Nichols) to undertake a study of the economic impact of encouraging local food procurement at an institutional level. The study was based on data provided by a number of large Alberta-based institutions (i.e. post-secondary institutions, conference centres, etc.), interviews with major food suppliers Sysco and Gordon Food Service (GFS), and a review of publically available data.

The current spending patterns and volumes of large institutions was analyzed and compared to the capacity of local producers. When possible, a shift towards increased local procurements was analyzed and expressed in terms of the anticipated contribution to employment, labour income, and Gross Domestic Product (GDP). Overall, the Study Team concluded that the economic impact of a shift towards local food procurement at an institutional level would have led to a 40% increase in jobs, labour income, and GDP as compared to current practices. Specifically, the total impact of institutional procurement following a shift to buy locally would be:

- 165 full-time equivalent jobs;
- \$8.46 million in labour income; and
- \$27.7 million in GDP.

This study was limited to analyzing the impact of institutions who participated in the Study or whose expenditures could be reasonably approximated from public data. The results of the study could be expanded and made more robust in the future if additional institutions could be compelled to participate.

1. Introduction

As one of Canada's oldest and largest agricultural societies, Northlands strives to support Alberta's farmers and ranchers by fostering the development of Alberta's agricultural industry and showcasing its innovations and success throughout the world. As a part of its on-going support of Alberta's producers, Northlands wishes to explore the degree to which encouraging local food procurement may positively impact the province's agricultural sector and economy overall.

The purchasing of food is a ubiquitous activity - individuals, households, firms, and institutions all regularly buy food for personal consumption, resale, distribution to clients, or as intermediate inputs into more complex products. Furthermore, the types of food available in the market are countless and range from simple basic ingredients to complex processed final products. In an effort to reduce the data requirements and to align with the interests of the key stakeholders engaged with Northlands in supporting this research, the scope of this study has been refined to the impact of increased local food procurement by selected institutions and the ensuing impacts on the provincial economy overall.

2. Study Methodology

The Study Team developed and executed the following approach to estimating the impact of increased local food procurement by institutions in Alberta.

- Develop a definition of what constitutes ‘local’;
- Collect data to develop an understanding of the current food procurement patterns and practices of participating institutions in Alberta;
- Explore the degree to which local capacity exists for key commodities currently being purchased from non-local suppliers;
- Estimate the economic impact of a hypothetical shift from the current procurement patterns to more locally focused procurement.

2.1 Defining Local

Nichols Applied Management’s approach to study the local food market in Alberta began by defining “local”. A clear definition of local was needed in order to establish the analytical parameters and geographic boundaries of the economy to which benefits may accrue for this project as well as to allow for the proper identification of products as being local.

The Study Team conducted a scan of various organizations and entities¹ across North America that defined “local” food. The literature revealed that food is generally considered to be local based on attributes that relate to:

- distance (i.e. distance between point of production and point of sale);
- means of production (i.e. sustainably produced or not); and
- means of selling (number of supply chain entities).

The most widely used definitions make reference to the distance that a commodity or product travels from where it is grown or produced to the buyer. Well-regarded research institutions as well as both the federal governments of Canada and the United States rely on distance travelled as the test for local. For example:

- The Canadian Food Inspection Agency defines local as food produced in the province in which it is sold or if near a provincial border, food sold within 50 kilometers of the originating province.²

¹ Several types of entities were reviewed including: governments, certification programs, non-profits, retailers, community supported agriculture (CSA) programs, and other local food initiatives.

² <http://www.inspection.gc.ca/food/labelling/food-labelling-for-industry/origin/local-food-claims/eng/1368135927256/1368136146333> (Accessed: May 15, 2016)

- The United States Department of Agriculture defines local food as food that has travelled less than 400 miles from its origin, or produced in the state in which the product is being sold.³
- The Conference Board of Canada states that local food is “food consumed as close to where it is produced [or] processed as is reasonably possible” and allowing other foods to be considered “local by taking into account regional differences in availability and seasonality if a product is not produced in the local region.”⁴

Although desirable in their simplicity, the above-noted definitions are not well-suited to the study of complex goods comprised of multiple inputs from various sources that may have been grown and processed in different locations. In an effort to overcome the challenges faced when dealing with processed goods, some research has turned to a definition more focused on the supply chain of a particular good. For example:

- some entities focus on how the product was sold such as requiring producers to sell in a “short” supply chain or directly to customers;⁵ and if a short supply chain is not possible products could be ranked on “how local” or to what extent the product is local such as the location of all the entities involved in the supply chain.⁶

Although more nuanced, this approach requires extensive knowledge of the supply chain and production process for each ingredient in a multi-ingredient good. As such, the informational burden to a robust analytical study would likely prove to be prohibitive.

In an effort to overcome the informational burden associated with multi-input goods and align with more widely used definitions, including that of the Steering Committee, this study will rely on the following definition of local:

- a local product must be from Alberta and must meet at least two of the three criteria:
 - a primary commodity must be grown or raised in Alberta; or
 - a processed product must be produced/processed in Alberta; or
 - a business engaged in the supply or sale of a good must be owned and operated in Alberta.

Taken together, these three criteria satisfy the commonly agreed-upon requirement of local being from a specific province and align with the Steering Committee’s desire to consider the

³ http://www.ers.usda.gov/media/122868/err97_1_.pdf (Accessed: May 15, 2016)

⁴ http://www.actualitealimentaire.com/wp-content/uploads/2013/08/14-021_localfood_cfic_rpt.pdf (Accessed: May 15, 2016)

⁵ The Conference Board of Canada mentioned requirements of a direct or short supply chain. Available at: http://www.actualitealimentaire.com/wp-content/uploads/2013/08/14-021_localfood_cfic_rpt.pdf

⁶ The USDA Farm to School Program ranked the products it purchased by “how local” the product was by the location of the supply chain, including where it was: harvested, prepared, packaged, processed, stored, and/or distributed. Available at: <https://www.youtube.com/watch?v=hf-y6S3v6UI>.

agricultural, manufacturing, economic, and community development impacts of local food procurement.

2.2 Data Collection

2.2.1 Participants

The Project Steering Committee consists of representatives of large institutions currently operating in Alberta, including:

- University of Alberta -- North Campus;
- University of Alberta -- Augustana Campus;
- Northern Alberta Institute of Technology (NAIT);
- Alberta Health Services;
- Northlands; and
- the Shaw Conference Centre.

As key stakeholders in the study, these institutions agreed to participate in the collection of data to support the analysis.

The institutions' primary source of food is currently through large distributors and, throughout the course of the study it was made clear that it is unlikely that the institutions would go outside of these distributors to purchase large quantities of local food directly from farmers or producers⁷. Therefore, the two largest food distributors were approached and agreed to participate, namely:

- Sysco; and
- Gordon Food Service (GFS).

Together, these eight stakeholders and food distributors were able to provide considerable insight into the manner in which food is currently purchased by institutions in Alberta.

⁷ Institutions that purchase directly from producers reported that for a variety of reasons it would be difficult to expand their direct purchases. Some of the reasons include: lack of trucking/handling stations for direct-producer deliveries, time limitations in handling individual producer relations and deliveries, price differentials that make local purchases cheaper through distributors, and difficulty in purchasing from producers that do not have various health certifications and insurance required to sell to the institutions. Also, local food hubs such as Sun Fresh were not included, as the distributors reported during interviews that local food is not always guaranteed (as they also sell non-local produce) and the supply can be inconsistent, so the food hubs are not necessarily reliable sources of local food.

The Study Team designed interview guides for both the institutions and distributors to obtain general food procurement information and data (see Appendix - Discussion Guides for sample interview guides). The institutions were asked a series of questions related to:

- the structure of their food services;
- local and non-local food procurement practices; and
- perceived options to expand local food procurement.

The distributors were subsequently asked about how, as intermediaries (buyers and sellers of produce), they procure and distribute local and non-local food, as well as information on their perceived opportunities to increase the availability of local foods to institutions.

Key areas of inquiry when conducting interviews with stakeholders included:

- prominent commodities;
- seasonal variation in supply and demand; and
- price considerations.

2.2.2 Key Commodities

The institutions included in the Study currently procure hundreds of different food products, the analysis of which would be prohibitive. Therefore, the Study Team confined the collection of data to the ten most prominent ingredients of each institution. The institutions were asked to limit their product list to primary commodities rather than processed commodities because of the difficulty in measuring the economic impact of processed products.⁸

In addition to the institutions' ten-most prominent products, the Study Team requested that the institutions also include four vegetables that are typically grown in Alberta greenhouses. The four greenhouse vegetables include: lettuce, tomatoes, cucumbers, and peppers. These four were included because they are vegetables that are commonly purchased, are grown in Alberta in significant volumes, and have the potential to be purchased during winter months when field crops are not available.

2.2.3 Seasonal Availability

The availability of certain commodities in Alberta is expected to vary seasonally. In order to delineate seasonal effects from the preference for local goods, the Study Team collected data regarding the season in which commodities were purchased (Fall, Winter, Spring, Summer).

⁸ The variations in the ways in which processed products are processed make it difficult to isolate the economic impact of a processed product.

2.2.4 Price and Quantity

The institutions were asked to provide a monthly average quantity and price for each product purchased. The price data was later relied upon to provide insight into the seasonal price variations that the institutions encounter throughout the year and allowed the Study Team to identify price differences between local and non-local goods.

2.3 Identification of Local Capacity

Having identified the existing procurement patterns of the participating stakeholders, the Study Team reviewed publically available data regarding the current output of the agricultural sector in Alberta to determine if the capacity to produce particular goods currently exists within the Province. Those products which could be procured in Alberta were included in the subsequent analysis of a hypothetical shift towards local purchasing.

2.4 Estimation of Economic Impacts

Using the profile of the existing procurement patterns of the participating institutions and the understanding of local capacities, the Study Team then estimated:

- The economic impact of the current purchasing habits of institutions; and
- The hypothetical impact of institutions shifting their habits to purchase local options of key ingredients when available.

The Study Team relied on the Input-Output (IO) Model, built and maintained by Alberta Finance, to develop estimates of the economic and fiscal impact of current and hypothetical purchasing habits. The IO model is a type of general equilibrium model that, conceptually, allows an analyst to quantify the economic and fiscal impacts of a particular activity as the spending associated with the activity ripples through the economy due to the interconnected nature of various sectors and markets. The model aims to capture the interdependencies between industries by linking forward (sales) and backward (purchases) transactions across industries and with the final demand sector. Specifically, an IO model considers the:

- direct impacts of project expenditures on goods and services;
- indirect impacts of project expenditures as suppliers to the project and related industries expand their output to meet the needs of the project; and
- induced impact of the project as the additional income paid to employees of the direct and indirect sectors is circulated through the economy.

Together, the direct, indirect, and induced impacts constitute the full economic impact of a project or activity. The economic impacts of an activity can then be expressed using the following metrics:

- employment, expressed in terms of full-time equivalent (FTE) jobs;⁹
- value added, expressed in terms of Gross Domestic Product (GDP); and
- earnings, expressed in terms of employment income.

2.4.1 Key Assumptions and Limitations of the IO Model

An economy is a dynamic and complex system comprised of millions of different actors all of whom are responding to a complex system of incentives and flows of information. As such, expressing the relationships between and behaviours of people and firms mathematically requires some simplifying assumptions. Key assumptions of the Alberta IO model relied upon in this study include:

- production functions are fixed and linear (Leontief Production Function) which necessarily implies constant returns to scale in production;
- the supply of inputs is unconstrained and the prices of inputs are fixed and not sensitive to the magnitude of the shock being analyzed;
- the IO model tacitly assumes that the economy-wide response to the shock being analyzed occurs instantaneously and does not evolve over time; and
- all output decisions are demand driven.

Additionally, assumptions were made with respect to the annual procurement budgets of the participating institutions. Discussions with stakeholders revealed that annual food budgets were unlikely to change regardless of any cost savings that might be realized by shifting towards more local suppliers. Put simply - institutions will buy more or higher quality food, not reduce budgets. As such, it was assumed that any budgetary savings resulting from lower food prices would be spent on a representative bundle of food products.

⁹ One FTE is the equivalent of one person working full-time for one year. For example, ten FTE could represent ten people working full-time for one year or 20 people working full-time for six months.

3. Findings

3.1 Current Procurement Practices

Due to their relative size, the institutions in this study have significant buying power and serve a large number of customers each year. The Shaw Conference Centre has approximately 500,000¹⁰ guests each year; Northlands hosts more than 3 million¹¹ visitors each year; NAIT has approximately 26,000¹² students; The University of Alberta North and Augustana Campuses together have nearly 40,000 students,¹³ and Alberta Health Services, the largest of all the institutions, serves a significant number of customers across the entire province each year and has an \$80 million food procurement budget.¹⁴ Although not all customers across all the institutions purchase food, the size of the clientele indicates a potentially sizeable market share of food procurement in the region; and according to data provided by the institutions, it appears that AHS has a budget nearly 30 times the budget of Northlands and more than 20 times the budget of the University of Alberta, North Campus.¹⁵

In addition to the sheer number of customers the institutions serve each year, the institutions also serve different types of customers. For example, the three educational institutions (University of Alberta, North and Augustana Campuses and NAIT) all have clients (i.e. students) that are likely more sensitive to price and thus local food purchases would need to meet certain price thresholds to be viable in the operation. The other institutions (Shaw Conference Centre and Northlands and presumably AHS) have the ability to increase prices of local food purchases to a certain extent because their clientele are more able to absorb price increases.¹⁶ The institutions therefore have different sensitivities to prices even though they are all purchasing large quantities of foods.

The institutions also have varying forms of managing their food services. The University of Alberta North Campus has an outside organization, Aramark, managing its food services. This type of management contract can have different implications for local food purchases; the food service manager (FSM) often has to go through the national head office to approve and add local vendors (if they are not already available) and negotiate prices.¹⁷ However an in-house

¹⁰ <http://www.shawconferencecentre.com/about-us/> (Accessed: August 15, 2016)

¹¹ http://www.northlands.com/wp-content/uploads/2014/01/AnnualCommReport_2015.pdf (Accessed: August 15, 2016)

¹² <http://www.nait.ca/50198.htm> (Accessed: August 15, 2016)

¹³ <https://www.ualberta.ca/about/facts/students> (Accessed: June 15, 2016); <https://www.ualberta.ca/augustana/> (Accessed: June 15, 2016)

¹⁴ <http://www.albertahealthservices.ca/assets/about/publications/ahs-pub-2015-2016-financials.pdf> (Accessed: November 5, 2016)

¹⁵ Data provided by the institutions.

¹⁶ It is unclear if Alberta Health Services' customers are able to absorb price increases; the institution is a publically-funded institution but their customers include staff, patients, and visitors making it difficult to decipher how the institution and its customer base would respond to increased prices.

¹⁷ A Group Purchasing Organization (GPO) is sometimes used which allows a food service manager to obtain lower prices when buying for a group of businesses.

food service management system does not have to go through an intermediary to make changes to its food procurement process and can directly negotiate with the food distributor.

All the institutions have indicated an interest in purchasing as much local food as possible. Shaw Conference Centre and Northlands have more aggressive targets with a minimum of 50% of their food to be procured locally. The other institutions are all trying to expand their local purchases as much as possible.

3.2 Current Distributor Practices

The two distributors included in the study, Gordon Food Service and Sysco, are the largest food distributors that service the institutions in this study. Both distributors have a local Edmonton office; however, they service a wider region that includes northern Alberta/Saskatchewan/British Columbia and all of the Yukon and Northwest Territories. The distributors do offer local products and do so using a definition that is highly similar to the one outlined in section 2.1 of this report.

Although the two distributors have similar definitions for local, their means of procuring local food is quite different. Gordon Food Service (GFS) takes a one-stop shop approach to local food procurement; they procure nearly all of their local food products through one supplier, The Organic Box. This supplier essentially acts as a food hub for local foods in the region and has a contract with GFS to provide next-day delivery of all local food items that are available. GFS chose to buy local foods from The Organic Box to make a wide range of local foods available, at an “acceptable” price, with short delivery times. By going through an intermediary, GFS reduces their time spent on coordinating local food deliveries from many individual vendors and does not need to inspect individual producers/processors. All the local foods purchased through GFS will primarily be organic, which is one major difference between the local products each distributor offers. Sysco, on the other hand, works with multiple vendors, on an individual basis, to procure local foods. Sysco also tries, to the extent possible, to purchase from vendors that customers have requested they buy from; many producers sell to Sysco, however, not all producers want to sell to large distributors, so there are some limitations in terms of which producers/processors will work with Sysco. Both distributors said that their local foods can include foods that are grown outside of Alberta (e.g. British Columbia etc.) and thus the institutions need to specifically request Alberta-only products.

Together the distributors make a significant portion of local foods available for purchase to the institutions. GFS is able to offer hundreds of local products that were not available before contracting with The Organic Box and Sysco has approximately 80 producers that are providing local foods to them and they expect the number of producers to grow, and a number of those producers have forward contracts that guarantee future supplies.

3.3 Current Institutional Procurement

Due to resourcing constraints, not all institutions listed in section 2.2.1 were able to provide fulsome procurement data to the Study Team. As of December 2016, half of the institutions on the Steering Committee had supplied the required information. Therefore, the Study Team used budget information, data collected from participating institutions, and qualitative information collected during interviews to approximate the purchases of the non-reporting institutions.

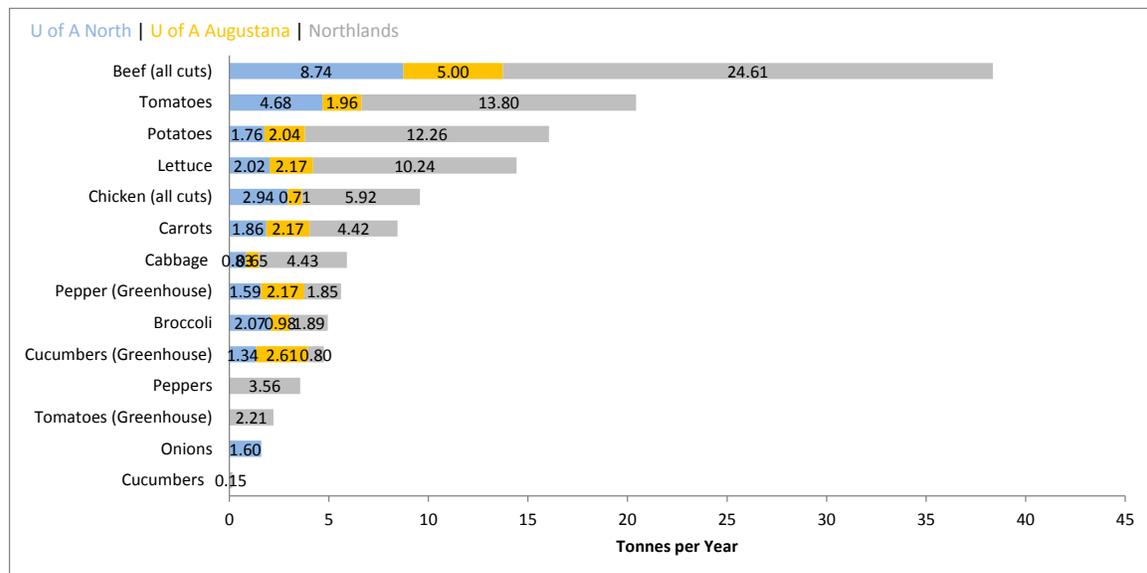
Most Prominent Commodities

The three institutions that provided their purchases had relatively similar top-ten product purchases. Among the three institutions, the top products include the:

- greenhouse vegetables of: peppers, cucumbers, and tomatoes;
- field crops of: potatoes, lettuce, carrots, cabbage, broccoli, peppers, onions; and
- beef and chicken (all cuts).

See Figure 3.1 below for the quantities purchased of each item by all three institutions combined.

Figure 3.1: Most Prominent Commodities Purchased by Institution

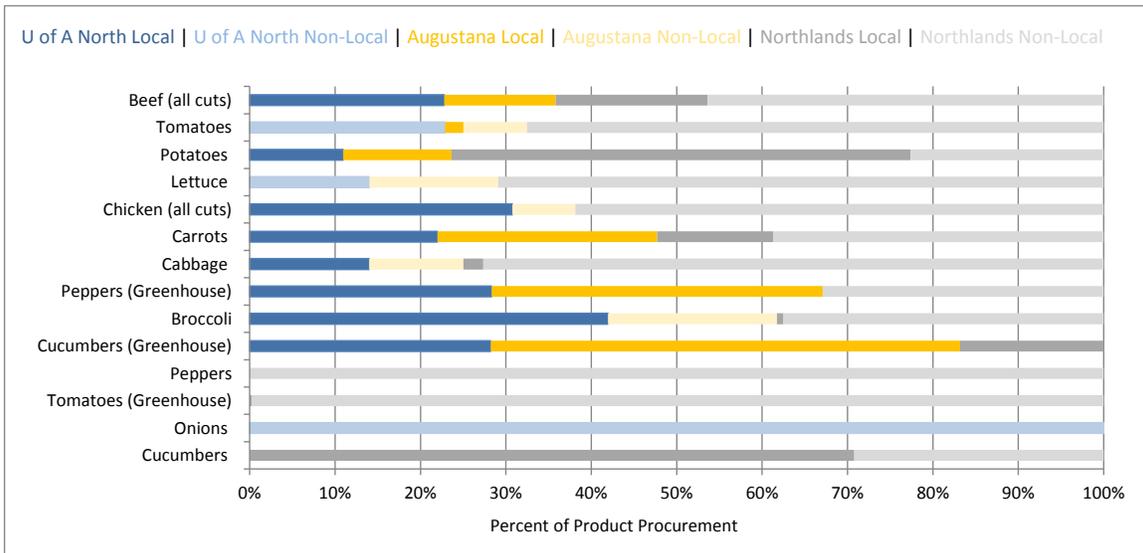


As shown in Figure 3.2, the commodities listed in Figure 3.1 are procured, in varying degrees, from a combination of local and non-local suppliers. The amount of local purchasing ranges from 100% for greenhouse cucumbers to 0% for onions and greenhouse tomatoes. Moreover, there is variation in local versus non-local buying within and across institutions. For example, Northlands appears to purchase both local and non-local cucumbers, whereas the preference for local

versus non-local potatoes appears to be consistent within institutions. Several possible explanations exist as to why an institution may appear to choose both local and non-local suppliers. They include:

- Seasonal availability;
- Supply limitations; and
- Price and quality considerations.

Figure 3.2: Most Prominent Commodities Purchased by Institution



Seasonal Availability

Further examination of the seasonal variation in supply for each of the key commodities revealed that, as shown in Table 3.1, the vast majority of the commodities are available year-round. Although seasonal availability may affect the purchase of select produce such as non-greenhouse tomatoes, there appears to be the opportunity for certain goods to be procured locally year-round.

Table 3.1: Commodity Availability by Season

Commodity	Year-Round	Fall	Winter	Spring	Summer
Peppers	x				
Peppers (Greenhouse) (local)	x				
Peppers (Greenhouse)	x				
Tomatoes (local)		x			x
Tomatoes	x				
Tomatoes (Greenhouse) (local)			x		
Tomatoes (Greenhouse)	x				
Cucumbers	x				
Cucumbers (Greenhouse) (local)	x				
Cucumbers (Greenhouse)					
Lettuce	x				
Broccoli (local)					x
Broccoli	x				
Cabbage (local)	x				
Cabbage	x				
Onions	x				
Carrots (local)	x				
Carrots	x				
Potatoes (local)	x				
Potatoes	x				
Beef (all cuts) (local)	x				
Beef (all cuts)	x				
Chicken (all cuts) (local)	x				
Chicken (all cuts)	x				

Available Supply

Having eliminated the possibility of seasonal availability as the sole driver of local/non-local purchasing, the study team explored the capacity of local suppliers to meet the need of the selected institutions in the province. Having adjusted the required volume to account for non-participating institutions¹⁸, the Study Team compared the local supply of key commodities relative to the volume consumed by institutions. As shown in Figure 3.3, the limiting factor in local purchasing appears to be the capacity of local suppliers in the case of peppers, tomatoes, lettuce, and perhaps broccoli. There is some uncertainty with respect to the available capacity of local suppliers due to the limited scope of this study – the volume demanded by other consumers (i.e. households, restaurants, etc.) is not fully known and therefore may further limit the available local supply. Given the size of capacity of local suppliers in all key commodities except broccoli, it is unlikely but possible.

Figure 3.3: Share of Institution Purchases Relative to Provincial Supply, Tonnes

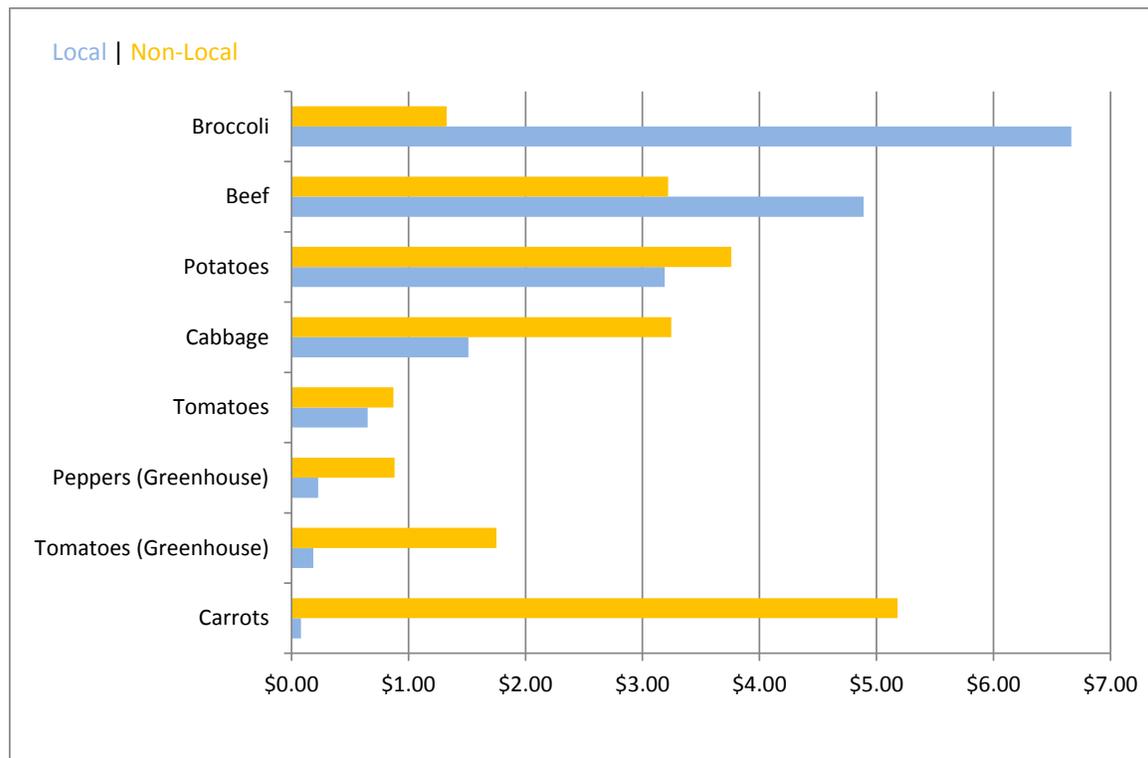


¹⁸ Adjustments were made by applying the publicly available budget figures from non-participating institutions to the commodity list and relative proportions purchased by participating institutions.

Local Price Differential

Barring limitations on available supply, the remaining barrier to local procurement – price – was scrutinized to determine if locally produced goods were more expensive than non-local alternatives of a similar quality. Figure 3.4 shows the average price paid by the three participating institutions for products broken down by local and non-local prices. With the exception of broccoli and beef, local variants of the key commodities appear to be significantly cheaper than non-local alternatives.

Figure 3.4: Average Price Paid by Institutions per Pound, Local versus Non-local



Note: prices are from the Fall/Winter season where data was most comprehensive from the institutions. Prices for local chicken, local lettuce, and non-local greenhouse cucumbers, are not provided because they are not purchased by the three institutions.

Having eliminated seasonal variation, supplier capacity, and price differentials as the limiting factors on local procurement, it was determined that there appears to be the opportunity for institutions to increase the purchase of local commodities at no additional cost. This finding is somewhat unusual insofar as the markets for the key commodities identified in the study do not appear to be working efficiently – that is to say, purchasers appear to be non-responsive to lower priced options for similar goods. This issue of inefficient markets with respect to local food is not a new phenomenon and has been well-documented by others. Possible strategies to overcome these impediments are discussed in greater detail in section 3.5.

3.4 Economic Impacts

Using the IO model described in section 2.4, the study team estimated the economic impact of the current procurement habits of the participating institutions as gathered through the interview and data collection phase of the report. Following the depiction of the current state of the purchasing institutions and the suppliers, the Study Team developed a hypothetical locally focused procurement plan for the institutions that involved a shift from the current purchasing plan to one that substituted local alternatives when seasonality, supply constraints, and prices were not found to be constraining factors.

3.4.1 Economic Impact of Current Practices

The purchases made by participating institutions (direct effects, discussed in section 3.3) total approximately \$90 million annually and will ripple through the economy as suppliers expand their output (indirect effects) and as wages paid to labour are spent on day-to-day items such as food and clothing (induced effects). Together, the sum of these ripples constitutes the total economic activity associated with the purchase of food by the participating institutions.

Employment Effects

The impact of institutional procurement in 2016 on employment, expressed as full-time equivalent¹⁹ (FTE) jobs, was:

- 100 direct and indirect; and
- 18 induced jobs.

Income Effects

The impact of institutional procurement in 2016 on household income was:

- \$5.2 million to direct and indirect workers; and
- \$825,000 to induced workers.

The implied average wage for each of the direct, indirect, and induced jobs supported by institutional procurement is, on average, \$52,000, and \$45,800 respectively.

GDP Effects

A commonly used metric of macro-economic value-added output in an economy is Gross Domestic Product (GDP). This measure captures the value of the goods and services produced

¹⁹ One FTE is equal to one person working full-time for one year. For example, ten FTE could represent ten people working full-time for one year or 20 people working full-time for six months.

for final domestic consumption, export, or investment. The impact of institutional procurement in 2016 on the GDP of Alberta was:

- \$18 million in direct and indirect effects; and
- \$1.9 million from induced activity.

Within the broader context of the provincial economy, whose GDP measured \$333.1 billion in 2015, the activity associated with food procurement by the participating institutions represented less than one-tenth of one percent of total provincial output.

3.4.2 Economic Impact of Buying Local

Assuming a shift towards the local procurement of key commodities when seasonal variation, supplier capacity, and price were not deemed to be limiting factors, the economic impact of a more locally focused procurement strategy by the participating institutions is as follows.

Employment Effects

The impact of institutional procurement in 2016 on employment, expressed as full-time equivalent²⁰ (FTE) jobs, would have been:

- 140 direct and indirect jobs; and
- 25 induced jobs.

In total, the employment associated with the more locally focused procurement strategy is expected to be 40% above the current approach.

Income Effects

The impact of institutional procurement in 2016 on household income would have been:

- \$7.3 million to direct and indirect workers; and
- \$1.16 million to induced workers.

The implied average wage for each of the direct and indirect, and induced jobs supported by increased local institutional procurement is, on average, \$52,000, and \$46,400 respectively - relatively unchanged from the current strategy.

GDP Effects

A commonly used metric of macro-economic value-added output in an economy is Gross Domestic Product (GDP). This measure captures the value of the goods and services produced

²⁰ Ibid.

for final domestic consumption, export, or investment. The impact of institutional procurement in 2016 on the GDP of Alberta would have been:

- \$25 million in direct and indirect effects; and
- \$2.7 million from induced activity.

In total, the total GDP associated with the more locally focused procurement strategy is expected to be 40% above the current approach.

The agriculture and forestry sector of the provincial economy represented approximately 1.6%, or \$5.3 billion, of the total GDP produced in the province in 2015. Relative to the agricultural sector overall, the increased GDP associated with the shift towards local food procurement constitutes roughly half a percentage point increase in GDP.

Within the broader context of the provincial economy, whose GDP measured \$333.1 billion in 2015, the activity associated with locally focused food procurement by the participating institutions represented less than one-tenth of one percent of total provincial output.

Although relative to the agricultural sector as a whole and the provincial economy overall, the expected changes in GDP are small, the magnitude of the changes outlined above may be significant to a selection of small producers who are struggling to achieve high-volume sales or generate the sales required to support engaging in long-term supply contracts with institutions or their suppliers.

3.5 Study Limitations

The study was executed as planned, however; one notable limitation should be front-of-mind when interpreting the results. Specifically, half of the institutions represented on the Steering Committee (section 2.2.1) were able to provide data regarding their current procurement practices – significantly limiting the sample size available for analysis. Most notable in their absence is Alberta Health Services whose annual food budget of approximately \$80 million constitutes the vast majority of the \$90 million in expenditures contemplated in this report. As such, assumptions were made about the non-reporting institutions with respect to the nature of their purchases based on data collected from those institutions who did participate.

The robustness of the study findings could be improved significantly if the number of participating institutions could be increased. The Study Team conducted the analysis in such a way that, should Alberta Health Services or any of the other non-participating institutions choose to share any procurement data, the results could be updated in relatively short order.

3.6 Opportunities to Grow

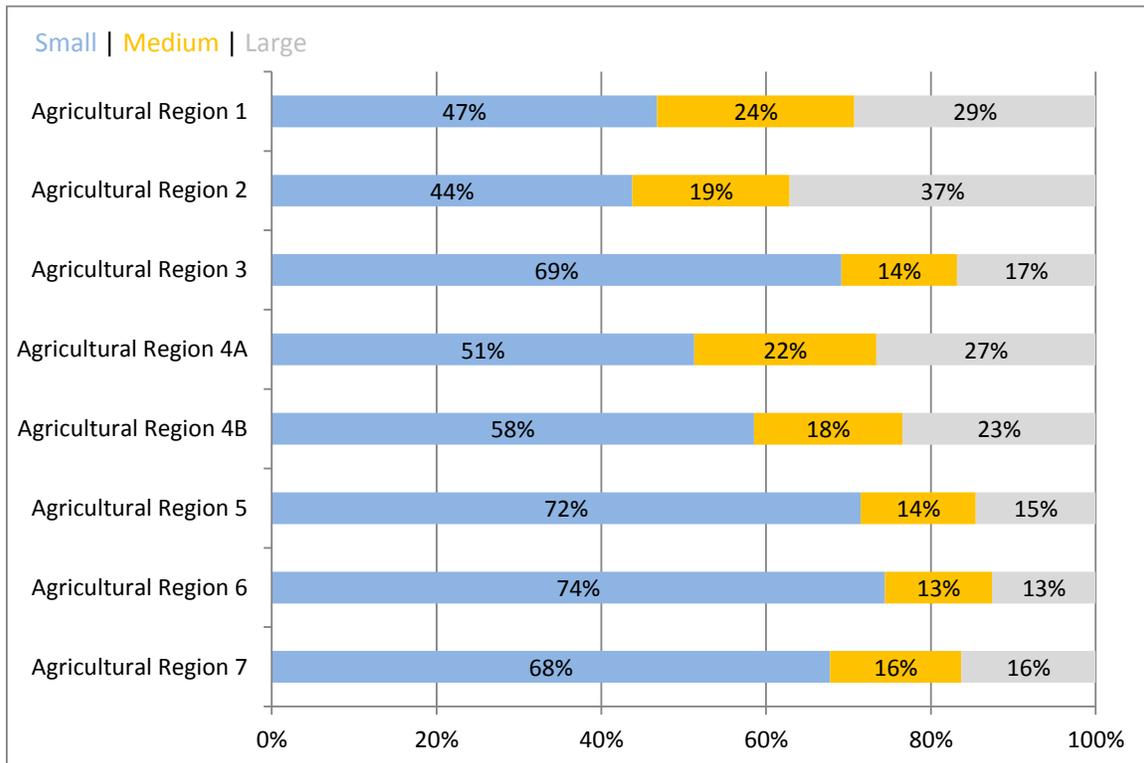
The apparent inefficient markets operating in food distribution (section 3.3) represent an opportunity for organizations, such as Northlands, to become engaged in an effort to realize the opportunities for increased economic activity articulated in the preceding section. The Study Team reviewed available literature to identify solutions that have been attempted in other jurisdictions and found that the establishment of food hubs often serve to reduce barriers to local food markets – primarily those related to market access.

Food hubs are entities that act as aggregators, processors, and distributors of local foods, and usually consist of one or more warehouses that are located near a community of agricultural producers and consumers.²¹ Food hubs typically serve medium-sized producers because large and small producers already have outlets for their products; large producers usually sell to large distributors and small producers typically sell directly to consumers. This leaves medium-sized producers with fewer outlets for their product; they are too large to sell directly to consumers in a direct sales setting (i.e. farmer's market) and too small to sell advantageously into international markets. Thus food hubs can serve as an intermediary to aggregate more mid-sized producer products and deliver them to local food markets. Food hubs could also play a role in aggregating smaller producer products which would allow them to sell into larger markets than they would be able to otherwise.

As Figure 3.5 shows, all of the agricultural regions in Alberta have a significant share of small and medium producers. In Regions 3, 5, 6, and 7, 80% of producers are classified as small or medium; Regions 1, 4A, and 4B, and Region 2 are classified as 70% and 60% respectively. This data supports the idea that in Alberta there is room for food hubs to enter the supply chain and begin aggregating local products.

²¹ <http://www.extension.umn.edu/rsdp/community-and-local-food/marketing-local-food/food-hub-resources/>
(Accessed: June 20, 2016)

Figure 3.5: Farm Size in Agricultural Regions in Alberta



Note:

1) Agricultural Regions are defined by Statistics Canada for the Agricultural Census. A map of the regions is available at: <http://www.statcan.gc.ca/ca-ra2006/m/car-rar-eng.pdf>. Statistics Canada. Table 004-0233 - Census of Agriculture, farms classified by total gross farm receipts in the year prior to the census, every 5 years (accessed: November 11, 2016).

2) The definition of small, medium and large producers is based on annual gross farm receipts as defined by Statistics Canada.

3) Small <\$100,000; medium \$100,000 - \$250,000; large \$250,000+.

There remain additional market access challenges including:

- food safety requirements. Meeting these standards, however, could be cost-prohibitive for some producers, as they could increase the costs of record keeping, compliance, implementation, and/or require new purchases of equipment or liability insurance.
- insurance requirements, such as: liability insurance, food and safety insurance, and Good Agricultural Practices (GAP) certifications which can prove costly to mid-size producers who are not guaranteed of returns following a rather sizeable cash outlay.²²

²² GAP certifications are received under a voluntary audit that verifies “fruits and vegetables are produced, packed, handled, and stored as safely as possible to minimize risks of microbial food safety hazards.” The audit program is conducted in the United States, Canada, and Puerto Rico and covers approximately 90 commodities. <https://www.ams.usda.gov/services/auditing/gap-ghp> (Accessed: June 20, 2016)

- barriers related to production of the product, including meeting volume, quality, and timing specification requirements of the buyers. Meeting production requirements could put new demands onto a producer for the quantity or quality of their product that they cannot guarantee. Some of these barriers can be overcome with a futures contract between the producer and buyer which stipulates that a fixed price for a certain volume will be paid for in future transactions. These types of contracts can give the producer a secure outlet and income for their product which can allow producers to invest in their production in ways to help meet local food demand.²³

If the mid-sized producers can meet food safety and insurance requirements as well as commit to the type of product they supply, new markets can open up for local producers.

The Edmonton region currently has two primary entities that function as food hubs.²⁴ One is Sunfresh Farms,²⁵ which provides local products primarily to grocery stores and other entities such as distributors. Another food hub is The Organic Box.²⁶ The Organic Box provides primarily organic products and sources foods locally and outside of Alberta, however, it takes a tiered approach to locally sourcing goods; emphasis is first on foods produced in Alberta, and if not available then British Columbia and if not available in western Canada, they then go to Eastern Canada and the United States and then source foods internationally.

Although the food hubs can play a role in delivering local food products to the institutions, they were not contacted as part of this study. In discussions with the distributors, it was noted that Sunfresh is a good provider of local food, however, because they do not solely provide local foods, any order placed through Sunfresh is not guaranteed to be local. For this reason, the distributors felt that it was not a reliable one-stop source for local food, and that they would always need to work with others to fill their local food procurement demands. The Organic Box, the other local food hub, currently has a contract with Gordon Food Service to provide all of its local food products, and thus this food hub is already being utilized to its fullest extent.

It was determined by the Study Team that there is not a large opportunity for the institutions or distributors to use the current food hubs beyond what is already being done. There does appear, however, to be an opportunity for a new type of food hub to be created which could provide local foods on a consistent basis that would include a large share of non-organic products. This type of food hub could fill the gap that the current food hubs do not provide in the market and potentially offer local food at lower prices with non-organic products. The Study Team suggests that this is one service Northlands could consider providing in the local food market. In addition, Sysco is currently procuring its local food through direct sales with farmers

²³ Sometimes future contracts can state that if a producer is not able to provide the required product to the buyer that the buyer can then source from other producers in the area; in effect all the producers in the region act as an insurance for the buyer.

²⁴ Note Pik-N-Pak is another food hub, but is much smaller and only works with a few greenhouse growers in the region.

²⁵ <http://www.sunfreshfarms.ca/content/58/> (Accessed: June 30, 2016)

²⁶ <https://www.theorganicbox.ca> (Accessed: June 30, 2016)

and producers, but they report that some producers that they have approached do not want to sell to a large distributor, as they believe a national distributor cannot represent a local food market. Northlands, since it is seen as a local entity with roots in community agriculture in Alberta, could encourage more local foods to be sold into the market by accessing farmers and producers that do not participate in the current system.

4. Conclusions

In summary, there appears to be an opportunity for participating institutions to increase the amount of locally produced food they purchase. Overall, the total impact of institutional procurement following increased local procurement is estimated to be:

- 165 full-time equivalent jobs;
- \$8.46 million in labour income; and
- \$27.7 million in GDP.

Key to achieving the impacts outlined above will be organizations who assist local producers to access supply chains and overcome barriers to supplying large institutions that include requirements related to safety, insurance, and consistency in volume, quality, and timing of supply. Agricultural organizations such as Northlands are well-positioned to undertake these activities and act as food hubs or otherwise support small local producers as they grow into fully engaged members of the institutional supply chain in Alberta.

Most notably, and as articulated in section 3.6, there appears to be an opportunity for a new type of food hub to be created which could provide local foods on a consistent basis that would include a large share of non-organic products. This type of food hub could fill the gap that the current food hubs do not provide in the market and potentially offer local food at lower prices with non-organic products.

5. References

- Alberta. Department of Agriculture and Rural Development. 2010. Local Food- A Rural Opportunity. (Edmonton: Agriculture and Rural Development). Available at: [http://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/csi13484/\\$FILE/Local-Food-A-Rural-Opp.pdf](http://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/csi13484/$FILE/Local-Food-A-Rural-Opp.pdf). Accessed: June 25, 2016.
- Alberta. Department of Agriculture and Rural Development. 2012. Community Supported Agriculture. (Edmonton: Agriculture and Rural Development). Available at: [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex14033/\\$file/812-21.pdf?OpenElement](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex14033/$file/812-21.pdf?OpenElement). Accessed: June 20, 2016.
- Alberta. Department of Agriculture and Forestry. 2015. Agriculture Statistics Yearbook 2014. (Edmonton: Agriculture and Rural Development). Available at: [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/sdd15546/\\$file/2014%20Yearbook%20in%20PDF%20for%20web.pdf?OpenElement](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/sdd15546/$file/2014%20Yearbook%20in%20PDF%20for%20web.pdf?OpenElement). Accessed: June 15, 2016.
- Barham, J., Tropp, D., Enterline, K., Farbman, J., Fisk, J., & Kiraly, S. 2012. Regional food hub resource guide. Washington, D.C.: U.S. Department of Agriculture, Agricultural Marketing Service. Available at: <https://www.ams.usda.gov/sites/default/files/media/Regional%20Food%20Hub%20Resource%20Guide.pdf>. Access: August 4, 2016.
- British Columbia Association of Farmer's Markets. 2012. Economic and Social Benefits Assessment. Provincial Report. Available at: [http://www.bcfarmersmarket.org/sites/default/files/files/BCAFM%20Economic%20and%20Social%20Benefits-%20Final%20Report%202013\(2\).pdf](http://www.bcfarmersmarket.org/sites/default/files/files/BCAFM%20Economic%20and%20Social%20Benefits-%20Final%20Report%202013(2).pdf). Accessed June 18, 2016.
- Buckley, J., Conner, D. S., Matts, C., & Hamm, M. W. (2013). Social relationships and farm-to-institution initiatives: Complexity and scale in local food systems. *Journal of Hunger & Environmental Nutrition*, 8(4), 397-412. Available at: <http://www.tandfonline.com/doi/abs/10.1080/19320248.2013.816988?tab=permissions>. Accessed: August, 5, 2016.
- Canadian Food Inspection Agency. Local Food Claims Interim Policy. Available at: <http://www.inspection.gc.ca/food/labelling/food-labelling-for-industry/origin/local-food-claims/eng/1368135927256/1368136146333>. Accessed: April 20, 2016.
- Caudell, E., and Harper, A. (n.d.). Forward Contracting Webinar. Michigan State University, Center for Regional Food Systems. Available at: <http://foodsystems.msu.edu/resources/webinar/Forward%20Contracting%20Slides.pdf>. Accessed: May 25, 2016.

- Chinnakonda, Dilip. 2007. Local and Regional Food Economies in Canada: Status Report. Agriculture and Agri-Food Canada. Available at: http://publications.gc.ca/collections/collection_2009/agr/A34-7-2007E.pdf. Accessed: June 28, 2016.
- Choi, K. 2015. Statistical Overview of the Canadian Greenhouse Vegetable Industry. (Ottawa: Agriculture and Agri-Food). Available at: http://publications.gc.ca/collections/collection_2015/aac-aafc/A71-39-2013-eng.pdf. Accessed May 25, 2016.
- City of Edmonton. Food and Urban Agriculture Advisory Committee. 2012. Fresh. Edmonton's Food & Urban Agriculture Strategy. Available at: https://www.edmonton.ca/city_government/documents/FRESH_October_2012.pdf. Accessed: May 25, 2016.
- Conference Board of Canada. 2013. Cultivating Opportunities, Canada's Growing Appetite for Local Foods. Available at: http://www.actualitealimentaire.com/wp-content/uploads/2013/08/14-021_localfood_cfic_rpt.pdf. Accessed May, 8, 2016.
- Congressional Research Service. February 2016. The Role of Local and Regional Food Systems in the U.S. Farm Policy. p.5. Available at: <https://www.fas.org/sgp/crs/misc/R44390.pdf>. Accessed: April 19, 2016.
- Gooch, M., Marenick, N., Zimm, V. Value Chain Management Centre. 2010. Increasing the Market Opportunities for Local Food. Available at: <http://vcm-international.com/wp-content/uploads/2013/04/Local-Food-Part-2-110910-FINAL.pdf>. Accessed: May 26, 2016.
- Gordon, S., and Piwowar, J. (n.d.). The availability of locally-grown food in Regina. Prairie Perspectives. Vol. 12. Available at: <http://pcag.uwinnipeg.ca/Prairie-Perspectives/PP-Vol12/Gordon-Piwowar.pdf>. Accessed: May 25, 2016.
- Greater Edmonton Alliance. (n.d.) The Way We Eat. Creating a Vibrant and Sustainable Local Food Economy. Available at: <http://greateredmontonalliance.com/wayweeat.pdf>. Accessed: May 27, 2016.
- Harvard Food Law and Policy Clinic. 2013. Tools for Advocates: Increasing Local Food Procurement by State Agencies, Colleges, and Universities. Available at: http://www.chlpi.org/wp-content/uploads/2013/12/Local-Procurement-Handout_FINAL_FOR-PRINTING.pdf. Accessed: June 25, 2016.
- Izumi, B. T., Alaimo, K., & Hamm, M. W. 2010. Farm-to-school programs: Perspectives of school food service professionals. *Journal of nutrition education and behavior*, 42(2), 83-91. Available at: [http://www.jneb.org/article/S1499-4046\(08\)00826-9/abstract](http://www.jneb.org/article/S1499-4046(08)00826-9/abstract). Accessed: August 3, 2016.

- Izumi, B. T., Wright, D. W., & Hamm, M. W. 2010. Farm to school programs: Exploring the role of regionally-based food distributors in alternative agrifood networks. *Agriculture and Human Values*, 27(3), 335-350. Available at: <http://link.springer.com/article/10.1007/s10460-009-9221-x>. Accessed: August 4, 2016.
- Johns Hopkins Center for a Livable Future. February 2016. *Instituting Change: An Overview of Institutional Food Procurement and Recommendations for Improvement*. Available at: http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/_pdf/research/Instituting-change.pdf. Accessed June 15, 2016.
- Klein, K., Thottathil, S., & Clinton, S. 2014. *Environmental nutrition: Redefining healthy food in the healthcare sector*. Healthcare Without Harm. Available at: https://noharm-uscanada.org/sites/default/files/documents-files/2819/Environmental_Nutrition_HCWH_September_2014.pdf. Accessed: August 8, 2016.
- Low, S.A., Adalja, A., Beaulieu, E., Key, N., Martinez, S., Melton, A., ... Jablonski, B.B.R. 2015. Trends in U.S. local and regional food systems, AP-068. U.S. Department of Agriculture, Economic Research Service. Available at: https://www.ers.usda.gov/webdocs/publications/ap068/51174_ap068_report-summary.pdf. Accessed: June 18, 2016.
- Low, S.A., Vogel, S. 2011. Direct and intermediated marketing of local foods in the United States. United States Department of Agriculture Economic Research Report Number 128. Available at: https://www.ers.usda.gov/webdocs/publications/err128/8276_err128_2_.pdf. Accessed: August 5, 2016.
- Lynch, J., Meter, K., Robles-Schrader, G., Goldenberg, M.P., Bassler, E., Chusid, S., & Jansen Austin, C. 2015. *Exploring economic and health impacts of local food procurement*. Chicago, IL: Illinois Public Health Institute. Available at: <http://www.crcworks.org/EHimpacts.pdf>. Accessed: June 21, 2016.
- Marenick, N., Gooch, M., Felfel, A. Value Chain Management Centre. 2010. Local Food Opportunities, Focusing on the Consumer. Available at: <http://vcm-international.com/wp-content/uploads/2013/04/Think-Piece-Local-Food-2010.pdf>. Accessed: May 26, 2016.
- Miller, S.R., Mann, J., Barry, J., Kalchik, T., Pirog, R., and Hamm, M.W. 2015. Valuing Michigan's Local Food System: A Replicable Model for Valuing Local Food. *Journal of Agriculture and Applied Economics*. Available at: https://www.researchgate.net/profile/Steven_Miller15/publication/270901754_A_Replicable_Model_for_Valuing_Local_Food_Systems/links/54b92e610cf253b50e28fe24.pdf. Accessed May 15, 2016.

- Mulik, K. (2016). Growing economies: Connecting local farmers and large- scale food buyers to create jobs and revitalize America’s heartland [Policy brief]. Union of Concerned Scientists. Available at: <http://www.ucsusa.org/food-agriculture/strengthen-healthy-farm-policy/%20growing-economies-connecting-local-farmers-and-large-scale-food-buyers#.WDZPPHeZMUJ>. Accessed: June 20, 2016
- National Farm to School Network. 2014. Evaluation for Transformation: A Cross-Sectoral Evaluation Framework for Farm to School. Available at: http://www.farmtoschool.org/Resources/Evaluation_Transformation_FINAL-Web.pdf. Accessed: August, 5, 2016.
- Ng, S. L., Bednar, C. M., & Longley, C. 2010. Challenges, benefits and strategies of implementing a farm-to-cafeteria program in college and university foodservice operations. *Journal of Foodservice Management & Education*, 4(1), 22-27. Available at: <http://fsmec.org/wp-content/uploads/2011/09/NgBednarLongley2010.pdf>. Accessed: June 18, 2016.
- Obadia, J.. 2015. Food service management companies in New England: Phase 1 research findings – Barriers and opportunities for local food procurement. Farm to Institution New England. Available at: http://www.farmtoinstitution.org/sites/default/files/imce/uploads/Report_FSMCs%20in%20New%20England.pdf. Accessed: June 18, 2016.
- Ohberg, L.A. 2012. What’s Stopping us? Identifying Barriers to the Local Food Movement Using Ontario, Canada as a Case Study. Masters Thesis, Department of Geography and Planning. Available at: https://tspace.library.utoronto.ca/bitstream/1807/33482/6/Ohberg_Lisa_A_201211_MA_thesis.pdf. Accessed May 26, 2016.
- Otto, D. and Varner, T. 2005. Consumers, Vendors, and the Economic Importance of Iowa Farmers’ Markets: An Economic Impact Survey Analysis. Leopold Center Pubs and Papers. Paper 145. Available at: http://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1146&context=leopold_publications. Accessed: June 25, 2016.
- Pesch, R. University of Minnesota, Extension. 2014. Assessing the Potential Farm-to-Institution Market in Central and Northeast Minnesota. Available at: <https://www.extension.umn.edu/community/research/reports/docs/2014-Assessing-the-Potential-Farm-to-Institution-Market.pdf>. Accessed June 19, 2016.
- Pirog, R. (ed.) 2013. Economic impacts of local and regional food systems; Response to questions from May 20, 2013 webinar. Available at: <http://foodsystems.msu.edu/uploads/files/econ-analysis-webinar-q-a.pdf>. Accessed: August 2, 2016.

- PolicyLink. 2015. Equitable development toolkit: Local food procurement. Available at: http://www.policylink.org/sites/default/files/edtk_local-food_procurement.pdf. Accessed June 18, 2016.
- Porter, D. 2006. Self-op vs. contract: What's right for your campus? *Strategic Thinking*. Available at: http://www.porterkhouwconsulting.com/articles/documents/SelfOpVsContract_000.pdf. Accessed: June 20, 2016.
- Rastegari Henneberry, S., Whitacre, B., and Agustini H.N. 2009. An Evaluation of the Economic Impacts of Oklahoma Farmers Markets. *Journal of Food Distribution Research*. 40(3). Available at: <http://ageconsearch.umn.edu/bitstream/99760/2/Evaluation%20pg%2064-78.pdf>. Accessed: June 20, 2016.
- Regional Analytics Inc. and PLANSCAPE. 2011. Economic Impacts of Farmer' Markets in the Province of Ontario. Available at: <http://www.planscape.ca/planscapePDFs/46-plan1.pdf>. Accessed: June 25, 2016.
- Sonntag, V. 2008. Why Local Linkages Matter. Findings from the Local Food Economy Study. Sustainable Seattle. Available at: http://www.usask.ca/agriculture/plantsci/hort2020/local_linkages.pdf. Accessed: May 24, 2016.
- Swenson, D., Eathington, L., & Chase, C. 2007. Determining the methods for measuring the economic and fiscal impacts associated with organic crop conversion in Iowa. Available at: http://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=1314&context=leopold_grantreports. Accessed: June 21, 2016.
- United States Department of Agriculture. 2016. The Economic of Local Food Systems, A Toolkit to Guide Community Discussions, Assessments and Choices. Agricultural Marketing Service. Available at: <https://www.ams.usda.gov/sites/default/files/media/Toolkit%20Designed%20FINAL%203-22-16.pdf>. Accessed: June 25, 2016.
- Vermont Agency of Agriculture (n.d.). Using food hubs to create sustainable FTS programs. Available at: http://agriculture.vermont.gov/sites/ag/files/FoodHubs_FTSPProgram%20Guide.pdf. Accessed: June 15, 2016.
- Vogt, R. A., & Kaiser, L. L. 2008. Still a time to act: A review of institutional marketing of regionally-grown food. *Agriculture and Human Values*, 25(2), 241-255. Available at: <http://link.springer.com/article/10.1007/s10460-007-9106-9>. Accessed: August 8, 2016.

Washtenaw County. Office of Community and Economic Development. 2013. The 25% Shift. The Economic Benefits of Food Localization for Washtenaw County and Ypsilanti & The Capital to Realize Them. Available at: <http://michaelshuman.com/wp-content/uploads/2014/01/Washtenaw.pdf>. Accessed: June 12, 2016.

Wittman, H., Beckie, M., Hergesheimer, C. 2012. Linking Local Food Systems and the Social Economy? Future Roles for Farmer's Markets in Alberta and British Columbia. *Rural Sociology* 77(1), pp. 36-61. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/ruso.2012.77.issue-1/issuetoc>. Accessed: June 15, 2016.

A. Appendix - Discussion Guides

INSTITUTION INTERVIEW GUIDE

This section of the interview solicited information about the general structure of each of the institution's food services.

INTERVIEW QUESTIONS

Question #1

Describe the food service locations.

Question #2

What types of food services are provided (*e.g. cafeteria, food court etc.*)?

Question #3

Describe what season the food service locations are open. Question #4

Please indicate whether the food services are managed in-house by the institution, or by a food service manager (FSM), or some combination of both management systems.

Question #5

If any of the locations are managed by a FSM, please provide the contact information for the person in charge of food procurement for that site.

This section of the interview solicited information about general food procurement practices for each of the institutions. This section was created to inform the economic impact analysis.

INTERVIEW QUESTIONS

Question #6

What are the top 10 products purchased (by quantity)? Of the top 10 products, are any of them available locally through the distributor?

Question #7

Are the top 10 products bought year-round? If not, what seasons are they purchased in?

Question #8

How much of each product (lbs or kg) is bought each month (or year)? What is the average price (by season) for the top 10 products?

Question #9

Does the institution procure food directly from producers or processors? If so, does the institution procure food directly through a contract (*e.g. forward contracting*)?

Question #10

What distributor does the institution use to procure food? Does the institution use the distributor strictly to deliver food or does it use the distributor also as a vendor?

Question #11

If the distributor is also the vendor, does the distributor use a preferred vendor list? If yes, then is the institution allowed to add a vendor to the approved vendor list?

Question #12

Does the institution or food service manager use a Group Purchasing Order (GPO) to procure food? Please provide details of the GPO.

This section of the interview solicited information specifically about local food procurement for the institutions.

INTERVIEW QUESTIONS

Question #13

Does the institution or FSM have an explicit policy requirement to procure local food?

Question #14 (FSM ONLY)

Does the contract between the institution and the FSM include a clause that requires local food procurement? Is there a certain percentage or quantity required?

DISTRIBUTOR INTERVIEW GUIDE

This section of the interview is intended to solicit information about the organizational structure of the distributor to procure local food.

INTERVIEW QUESTIONS

Question #1

Where is the distributor located? *(e.g. head office, regional /local offices)*

Question #2

What geographic region does each location serve?

Question #3

Who has authority within the distributor to oversee local food purchases? *(e.g. national or local level)*

Question #4

Does the distributor have dedicated staff members that focus on managing local food procurement and sales?

This section of the interview is intended to solicit information about the distributor's food procurement practices which includes both local and non-local foods. This section covers both the entities involved in procurement as well as what type of food is procured.

INTERVIEW QUESTIONS

Question #5

How does the distributor define "local" food? How does the distributor currently choose to procure local versus non-local foods? What are the decision factors?

Question #6

Describe the general process of non-local food procurement. *(e.g. who does the distributor work with; what types of food are procured; when/how often do the procurement transactions take place; why were the suppliers chosen, etc.)*

Question #7

Describe the general process of local food procurement. *(e.g. who does the distributor work with; what types of food are procured; when/how often do the procurement transactions take place; why were the suppliers chosen etc.)* **Does the distributor procure local greenhouse vegetables such as lettuce, tomatoes, peppers, cucumbers?**

Question #8

Does the distributor procure local food from any intermediary suppliers (e.g. food hubs or cooperatives) or directly from producers? What size are the producers? (e.g. small, medium, or large) Are there any forward contracts in place?

Question #9

Provide an estimate of what percentage of total food procurement comes from non-traditional suppliers (intermediary suppliers and producers) versus all other types of suppliers?

Question #10

What is required of a vendor to supply food to the distributor? (e.g. liability insurance, food safety/GAP certification, volume, quality, timing specifications, etc.)

Question #11

What process does the distributor go through to add a new vendor? (e.g. criteria, volume, pricing, contracts etc.) Is there a different process based on local versus non-local vendors?

Question #12

Does the distributor need to adhere to any volume purchase requirements from any of the intermediary suppliers or producers (if applicable), and is there a difference in requirements based on the type of supplier?

Question #13

Is the distributor actively trying to increase local food vendors? What types of food and why? Is there a formal initiative or target?

Question #14

Does the distributor buy raw products and process them in-house to sell? (e.g. pre-washed or chopped, etc.) Does the distributor buy local food; process it, and then sell it under the distributor's brand name? Does the distributor advertise it as a local product? Does the local product ever get mixed with non-local product and therefore not be eligible to be considered local anymore?

Question #15

Does the distributor have the capacity to collect and store local foods for distribution later? (e.g. summer harvest sold in wintertime) Does the distributor buy more local perishable or non-perishable foods? (e.g. canned versus fresh vegetables) Does the local food generally have a longer shelf life due to reduced time in transport?

Question #16

Does the distributor receive any economic benefits to buying local food? (e.g. higher sale price, lower transportation cost, less packaging needed, less storage needed, etc.)

This section of the interview is intended to solicit information specifically about the distribution of food to the distributor's clients. This section covers both the entities involved in the sales as well as what type of food is sold.

INTERVIEW QUESTIONS

Question #17

What distribution service agreements are available to clients? (*e.g. contract, partial contract or no-contract*) **What impact does the contract type have on the prices of the products? Does the contract depend on volume purchases?**

Question #18

When are clients allowed to change their contract type, if they so choose? Are there restrictions?

Question #19

If a client is under contract, are they able to buy outside of the distributor? What are the restrictions? If the distributor does not have a product available, is the client allowed to buy from other suppliers? (*e.g. distributors, producers, or processors*)

Question #20

If a client wants to buy a specific local food product but the distributor only offers a non-local product, is the client allowed to buy local food outside of the distributor? What are the restrictions? Can a client add a vendor?

Question #21

What is the method the distributor conduct sales with its clients? (*online orders, in-person, or both*) **Are all products available to all clients?**

Question #22

Does the client see whether a product is local or not during the ordering process? Is there a price difference for local versus non-local foods? (*e.g. please comment on price difference for a broad range of food categories—dairy, meat, vegetables etc.*) **Does the distributor charge a premium for local products? Are local products ever cheaper than non-local foods?**

Question #23

Does the distributor require a certain volume of product be purchased before it agrees to provide a product to a client? Do the requirements vary by product? (*e.g. are some products less restrictive than others*) **Does the distributor provide volume discounts? Are there any volume requirements in place now for the local foods that are available?**

Question #24

Does the distributor offer clients the ability to purchase smaller quantities of any product that do not meet their standard volume requirements? (e.g. does the distributor make exception for any products or clients or contract types that allow smaller quantities) Are any of the local foods that are already purchased, available to order on a shorter notice than the non-local foods?

Question #25

Does the distributor make the producer information available to its clients when ordering? (e.g. producer name, location, etc.)

Question #26

Does the distributor sell more fresh or processed local foods? If processed, are the products processed by the distributor or is it procured already processed?

This section of the interview is intended to solicit general information about the distributor's options to increase local food purchases and sales. The interview starts with information about current practices, followed by plans for future practices.

INTERVIEW QUESTIONS

Question #27

Is the distributor in discussions with any of the institutions to increase local food procurement? In the distributor's view, how willing are institutions to buy local food? What is being discussed? Any targets set?

Question #28

Does the distributor see itself acting as a food hub for local producers to sell product to its clients? (e.g. is the distributor willing to coordinate procurement and delivery of local foods as opposed to producers doing this on their own outside of the distributors) If not, is the distributor willing to work with any food hubs/co-ops to procure local food? Are there any barriers to working with food hubs/co-ops?

Question #29

If an institution/client were to procure local food products directly from a producer (on their own), would the distributor offer delivery services of that product? (e.g. as opposed to the distributor procuring and selling the product)

Question #30

Does the distributor offer volume discounts across multiple clients? (e.g. can multiple clients agree to purchase a certain volume of food thereby meeting volume requirements) If not, is the distributor willing to do this? Are there any barriers? Does the distributor see this as an option to increase local food procurement and sales?

Question #31

What products are available locally? (e.g. can the distributor provide a list) Does the distributor plan to expand the availability of local products?

Question #32

Are there any marketing challenges associated with being a nation-wide distributor that offers local food options? If so, is this an issue in Alberta?

Question #33

Is the distributor willing to keep certain local products available with lower volume purchase requirements?

Question #34

What are the major barriers to procuring local food? What are the major barriers to selling local food?