Investigating Farm to Restaurant Relationships in Worcester

An Interactive Qualifying Project Report submitted to the faculty of Worcester Polytechnic Institute in partial fulfillment of the requirements for the Degree of Bachelor of Science

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Abstract

There has been an increased demand for local food across the United States for more than a decade. Yet as the local food movement is increasing, many restaurants have not exploited this opportunity. We examined the feasibility of restaurants’ involvement in the Worcester, MA local food network. To increase restaurant participation in using local food we found that there must be an available and convenient method of ordering and delivery. Restaurants as a direct-to-consumer avenue for farms need local food suppliers to be visible, accessible, and price conscious. Also to further facilitate the “farm to restaurant” relationship strategies employing mutual marketing techniques can be used to add value to the products and inform the community.
Acknowledgements

Advisors

Thanks to our advisor Professor Robert Hersh and our co-advisors Professors Suzanne LePage and Elisabeth Stoddard for their guidance with the project. Their ideas and support helped push us forward with researching and shaping the project to account for a larger scope than we originally had thought of. Thanks to their patience in reading our many drafts of the report we were able to put forth our findings in a comprehensive report. Their support throughout the course of the project was highly appreciated and made the project an excellent learning experience.

Regional Environmental Council

Thanks to our project sponsors, Brian Monteverd and Casey Burns of the Regional Environmental Council for providing us with some idea of what is currently happening here in the local food scene of Worcester. With the information we gained through our talks we were able to get a better grasp of what organizations in the area were currently doing to bring local food to restaurants and other markets in Worcester. Their help in shaping our project scope and purpose was much appreciated.
Executive Summary

The availability of locally produced food is becoming increasingly available in stores and at farmers markets in the Worcester region (Keough, 2014). This increase in local food availability is an opportunity for local restaurants to take advantage of and supply local food for the increasing consumer demand (Martinez, 2010). The increase in local food consumption although beneficial to the restaurant industry has more far-reaching effects. Increased use of local products has positive economic (Risley, 2014), environmental (Grubinger, 2010), and individual (Martinez, 2010) effects. The Worcester restaurants and area in general serve as a good model for increased local food consumption as Massachusetts was one of only ten US states that saw an increase in the number of farms since 2007 (Keough, 2014). Also from Gary Keough at the National Agricultural Statistics Service, Massachusetts agriculture is supported significantly by direct-to-consumer sales with 13% sold to retail and an additional 6% produced for Community Assisted Agriculture (CSA). Worcester County poised ideally to support local agriculture ranks in the top ten counties of the nation for value of direct-to-consumer sales. (Keough, 2014)

The Regional Environmental Council (REC), a local nonprofit organization supporting their food justice mission, sponsored this project to assess current practices, demand for local food, and to investigate some key characteristics that could facilitate local food sale in restaurants in the city of Worcester. The REC works on a number of programs that support the local community including programs to teach the youth, as well as running a Mobile Farmers market. Their current involvement in our project is seen by their food hub feasibility study where the REC aims to further support a Worcester food hub by distributing to local restaurants.
Our research aimed to investigate three goals: to identify obstacles and key components that restaurants face when sourcing local food to assess the potential market for locally produced foods in Worcester restaurants, and to address how local food can be sourced and who is currently distributing local food. Through identifying the key components such as providing easy access to obtain local products, maintaining a desirable price, developing personal relationships, and utilizing mutual marketing as well as understanding the obstacles encountered in a farm to restaurant relationship, i.e. inconsistent delivery and availability of local products, difficulty in sourcing local products, and higher prices, this report sought to provide a strategy of how restaurants can be a participant in the direct-to-consumer agricultural sale model by sourcing local food directly from nearby farms.

To investigate our goals and develop a better understanding of how to source local food to restaurants our work was centered on interviewing chefs of Worcester restaurants and the key organizations that currently distribute local food. Additionally, a questionnaire was developed and administered using a Likert scale following each interview with a chef to provide a quantitative data source. A stratified sample of the Worcester restaurants was generated and was supplemented by a purposeful sample of restaurants that were previously known to use local foods. From the pool of more than thirty restaurants and organizations we conducted eleven semi-structured interviews which were electronically recorded and transcribed following the interview. The transcripts were put through qualitative interview analysis using NVivo analysis software. The analysis afforded the data that provided insight into sourcing local food to restaurants. The data resulted in conclusions on the market for local food in restaurants, the obstacles and key components, some of which just previously discussed, and methods that local
food is and could be sourced. The final recommendations of the study can be summarized into four main points:

- Ordering and delivery of food must be available and convenient for restaurants
- Restaurants need local food suppliers to be visible, accessible, price conscious while supplying high quality products
- Strategies of mutual marketing are important to add value to products and inform the community
- Key questions the Regional Environmental Council must ask
  - Is a food hub necessary for farm to restaurant local food distribution considering the success Lettuce Be Local has experience without one?
  - By what means can the REC collaborate and communicate with key the stakeholders involved in promoting and distributing local food?
  - How can the REC help farmers overcome the obstacles of supplying a food hub and restaurants?
  - How can a food hub with a social mission ensure viable farmer incomes while providing affordable food to restaurants?

The increased demand for local is on the rise and has been for more than a decade. Massachusetts and Worcester County are both poised to be an ideal place that can take advantage of the increased demand for local food due to the high percentage of direct-to-consumer food sales and increasing agriculture. This study serves as an introductory investigation into the Worcester local food network. Our research investigated how restaurants contribute to this local food network and emphasized what some restaurants in Worcester are currently doing to use local food.
Authorship

Kevin Barry was an active part of the team in the conducting and transcribing of interviews. He was the author of some sections such as the findings for the questionnaires as well as being involved in a large part of the editing and revising of the background and methodology chapters.

John Crawford was a key contributor to the Introduction, Definition of Local Food, Benefits of Local Food for the Producers and the Consumers, Farms as a Supplier, Interviews, Transcript Coding, and (etc). He participated in conducting interviews with chefs by scheduling, conducting, taking notes, and transcribing interviews. John contributed to other subsections of the report through revisions and editing.

Liam Fisher was a primary contributor to the Findings chapter through the synthesis of our coded interviews and conducted a large majority of the interviews. He was also a key contributor to the Introduction as well as sections of the Background, Methodology and Conclusion chapters including The Farm to Chef Relationship in the Food Network and Identifying Major Obstacles and Key Components for Restaurants. Liam contributed to other subsections of the report through revisions and editing.

Ryan Holmes was the primary contributor to the Introduction and discussion of the limitations of local food in restaurants, which can be found in the Background and Methodology chapter of the report. In addition, he was principle in the Appendix and work in the Conclusions chapters. Ryan was also involved in the interviewing and transcribing process and editing of the report.
Contents

ABSTRACT ii
ACKNOWLEDGEMENTS iii
EXECUTIVE SUMMARY iv
AUTHORSHIP vii
CONTENTS viii
TABLE OF FIGURES x
TABLE OF TABLES x
1.0 INTRODUCTION 1
2.0 BACKGROUND 3
   2.1 Definition of Local Food
   2.2 Benefits of Local Food for the Producer and Consumers
   2.3 Farm to Chef Relationship in the Food Network
   2.4 Difficulties getting Local Foods into Restaurants
   2.5 Farm to Restaurant Opportunities and Challenges in Worcester
3.0 MATERIALS AND METHODS 17
   3.1 Interviews
   3.2 Transcript Coding and Analysis
   3.3 Identifying major obstacles and key components for restaurants
   3.4 Assess the Demand for Local Food in Worcester Restaurants
   3.5 Address how Local Food can be sourced and who is currently distributing Local Food
4.0 FINDINGS 25
   4.1 Analysis of questionnaire Responses
   4.2 The Market for Local Foods in Restaurants
   4.3 The Obstacles and Key Components of sourcing locally
   4.4 Ways that Local Food is advertised and sourced
5.0 RECOMMENDATIONS 38
5.1 Ordering and Delivery of Food must be Available and Convenient for Restaurants

5.2 Restaurants need Local Food Suppliers to be visible, accessible, price conscious while supplying high quality products

5.3 Strategies of Mutual Marketing are important to add value to products and inform the community

5.4 Key questions the Regional Environmental Council must ask

REFERENCES 46

APPENDICIES 50

Appendix A: Semi-structured Interview Plan for Interviewing Restaurants
Appendix B: Interview Consent Form
Appendix C: Chef Questionnaire: To be administered before the Interview
Appendix D: Questionnaire Responses
Appendix E: To Obtain Interview Transcripts
**Figures**

Figure 1: 100 Mile Radius from Worcester, MA

Figure 2: The Circulation of revenue in the Manadnock region

Figure 3: Diagram of the thought process behind breaking down themes into code. Adapted from The Coding Manual for Qualitative Researchers.

**Tables**

Table 1: Sampling of Restaurants in Worcester Serving Lunch and Dinner
1.0 Introduction

The demand for more nutritious and higher quality local food has been on the rise in the United States for the last decade and has generated new marketing opportunities for farmers (Hjalager & Richards, 2002; USDA, 2013; Martinez, 2010). Some of these new avenues include farmers markets, community supported agriculture (CSA), agritourism, and other specialized events that involve innovative uses of the farm (Raiford, 2014; Bagi, 2014). By finding ways to access new markets, farms are able to be far more economically viable.

In many urban areas, farms are starting to sell more of their products directly to restaurants as a source of revenue. A Rasmussen poll conducted in 2013 showed that 58% of American adults eat out at least once a week which leaves restaurants uniquely poised to be one of the best avenues for increased distribution of local food within a community. Additionally, selling a product that is in high demand, like local food, can give both the farms and restaurants an economic advantage. Farmers can diversify their markets and sell more product at a premium price, while restaurants can exploit the growing interest in local foods and attract more customers.

In the city of Worcester, restaurants have yet to fully take advantage of growing consumer demand for local food. There have been efforts by organizations in Central Massachusetts to establish and facilitate farm to restaurant commerce but the farm to restaurant market remains challenging. In the Worcester area the groups attempting to foster farm to restaurant connections are Lettuce be Local, Central Mass Grown, Central Mass Regional Planning Commission (CMRPC), and the Regional Environmental Council (REC), the sponsor of this project. Our research for this project sought to assess the demand for local food in
Worcester, and to identify key characteristics of the farm to chef relationship in order to provide the REC with a benchmark of current local food use in Worcester restaurants.

We began this investigation by researching the demand for local foods in Worcester restaurants. Employing purposeful sampling of Worcester restaurants that currently source local foods and random sampling from a pool of Worcester restaurants, we interviewed nine chefs throughout the city. The semi-structured interviews explored how the restaurants make decisions related to sourcing food and the importance of factors such as consistent quality, reliable delivery, or desired quantities. A questionnaire was also used in conjunction with each interview to capture quantitative data about the chefs’ preferences. The interviews were transcribed and then compiled using NVivo, a qualitative analysis software.

The findings of the report showed that the restaurants care about providing a good product and a memorable experience for their patrons. But, the interviewed chefs indicated that the higher cost of providing local food was not always viable for them. Several of the businesses that currently use local foods put in the extra time and effort because they feel that the reward outweighs the cost. This group stated that some of the reasons local food is offered in their respective restaurants was due to great taste, attraction of customers, and benefits for the local economy.

Our project was intended to help the REC identify key components and obstacles of the farm-to-restaurant relationship. The project provides a glimpse into some of the difficulties encountered when interacting with restaurants and offers recommendations on how a provider of local food may be able to enhance product sales to this service oriented industry.
2.0 Background

This chapter examines the working relationships between farms and chefs in the context of a community’s food system. In the next section, we define local foods; we then identify the components of a local food network and consider how farm to chef relationships can be structured as well as the challenges of more closely connecting these two groups; we conclude the chapter by discussing the local network in Worcester.

2.1 Definition of Local Food

Local food has different definitions depending on who is defining it and for what purpose it is being used. Some organizations define local food in terms of geographical distance between consumption and production while others use guidelines based on the marketing arrangements of between farmers and direct retailers (Brian 2012). For example, the 2008 Farm Bill uses the guideline that a product sold within 400 miles of production can be labeled as “locally grown” while stores like Whole Foods limit this to 200 miles, and Wal-Mart uses the term to describe anything grown and sold in the same state (Schmidt 2008). For the purpose of this report, the term local food will describe produce and products that have originated within 100 miles of Worcester, MA as seen on Figure 1 below.
Using this 100 mile target area as a base for food that is local to Worcester was derived primarily from looking at the capabilities of the local organizations working already with local food and secondly from research done by the Leopold Center for Sustainable Agriculture at the Iowa State University as well as the definition of New Oxford American Dictionary’s 2007 word of the year “locavore,” meaning a local resident who tries to eat only food grown and produced within a 100 mile radius. While the Leopold Center found that about 67% of respondents identified local food as being produced within a 100 mile range, this definition is not a standard as research from the Journal of Food Distribution Research disagreed with this definition. (Swenson 2008; Durham, 2009).

2.2 Benefits of Local Food for the Producers and the Consumers

Foods that are produced, sold, and consumed locally can have benefits for public health, commerce, and the environmental while providing other intangible aspects that help foster a sense of community and investment for the future (Grubinger, 2010). Researchers have
identified three major areas that benefit from an increase in the procurement and sale of local food: the economy, environment, and the individual (Utah State, 2012).

**Benefit of Local Food to the Local Economy**

The most significant economic benefit from the more widespread use of local food is the increased sales for the local farming community. When food is purchased at a comparable price from a local producer, rather than from a distributor that must import the food from other regions or countries, local farmers receive an increased percentage of the sale (Gale, 1997). The local farmers may then re-introduce the monies gained from local sales back into the community by spending it at locally-owned businesses to purchase goods and services. A study published by Civic Economics (2014) looked directly at this multiplier effect within the Monadnock region of New Hampshire found that national chains circulate 13.6% of their revenue through the local economy compared to 62.4% by independent local retailers (Risley, 2014). This multiplier effect, can increase local job opportunities, raise tax revenues for local government, and enhance support for local non-profits that provide valuable services to the surrounding community (American Independent Business Alliance, 2014; Halwell, 2002).
Benefit of Local Food to the Environment

Local food has a larger impact than just the immediate economic benefit, as it can also have a positive impact on the environment. Food production that has the greatest environmental benefit has been shown to occur on farms that have a large diversity in their crops. The preservation of biodiversity on farms preserves the local genetic diversity in the plants grown therefore supporting a healthier ecosystem (Grubiner, 2010). Plant diversity also takes farming practices away from the heavy machinery associated with large scale monoculture. The smaller farms can avoid this equipment that is a major cause for soil erosion (Norberg-Hodge, 2002).
Additionally, local food preserves open space as farmers are less apt to sell their land (Grubiner, 2010).

**Benefit of Local Food for the Individual**

In 2014, the Food Marketing Institute investigated local food consumption by asking Americans why they purchased local food. The study resulted with 86% of the respondents (N=2116) saying their reason for buying local food was its freshness or in season (FMI Research, 2014). When compared to typically purchased food items, local food travels considerably less distance to the consumer. The relatively short amount of travel allows for it to be picked at peak ripeness, while maintaining freshness, therefore making it more nutritionally valuable. (Martinez et al., 2010) Also due to the short travel distances, locally produced food requires less preservatives and additives compared to produce from large scale agriculture (Norberg-Hodge, 2002)

By using local food the consumers are brought closer to their food source which speaks to the notion of “food sovereignty.” This notion means that local food can help move the control of food choices back into the hands of the consumer instead of the large scale food providers like national and international companies. In the Declaration of Nyéleni at the first global forum on food sovereignty in 2007 food sovereignty was defined as:

“… The right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations.” (Nyéleni Newsletter Number 13, 2013)

Local food has value to many different areas of everyday life. Local food benefits local economies by increasing support for small businesses and local farms. In supporting local farms,
the environment stands to benefit by preserving green space and genetic diversity as local food
does not fit large-scale monoculture techniques. Local food also allows for customers to become
more acquainted with their food providers, forming a stronger sense of community.

2.3 Farm to Chef Relationship in the Food Network

A local food network we will define as the farmers, chefs, restaurants, consumers, grocery stores, distributors and other entities that deal with local food. In the food network, the relationship that serves as the focus for this project is the relationship between the farmer and chef. To investigate the local food network it will be pertinent to address all of the following topics: the rise in demand for locally sourced food (Martinez, 2010); the role of local restaurants (Martinez, 2010; Food Processing Center, 2003); the local farm as supplier (National Agricultural Statistic Services, 2012); and organizations working to connect farms and chefs (Farm Fresh Rhode Island, 2015; Lettuce be Local, 2015; Central Mass Grown, 2015; Central Mass Regional Planning Commission, 2015).

The Rise in Demand for Locally Sourced Food

The rising demand for local food has been tracked by the USDA through a division called the Agricultural Marketing Services (AMS). The AMS creates reports on identified trends in order to highlight growth opportunities for American farmers and businesses. As part of the reporting from AMS, the national count of farmer’s market directory listings has increased 78% over 19 years primarily from the growing consumer interest in obtaining fresh products directly from a farm. The AMS has also shown a rise in services such as agro-tourism and value-added products, which have both developed in response to consumer demand for local food.
With growing consumer demand, Massachusetts has already shown to be a large supporter of local foods. The USDA’s Farm Service Agency page for Massachusetts notes that “agriculture contributes over $492 million annually to the state’s economy, ranks 5th nationally in direct market sales, and first in the percentage of farms practicing Community Supported Agriculture” (Niedzielski, 2014). This shows that there is indeed a demand of some form in Massachusetts for local food and that a local food relationship can indeed work.

Massachusetts is a good candidate for developing local food relationships based on the trends identified by the Census of Agriculture over the last several years. In the 2012 Census of Agriculture, Massachusetts was one of only ten states in the US that saw a growth in the number of farms as well as the amount of land allocated for farming since 2007 (Keough, 2014). This was in contrast with the remaining states that saw a 4% decrease in the number of farms. One of the most promising conclusions that the National Agriculture Statistics Service identifies was the success at which Massachusetts was about to meet the growing food needs of the surrounding metropolitan area (Keough, 2014). In 2012, Massachusetts listed 1,223 farms that produced nearly $125 million in fruit, nut, and berries. In addition to the farms Massachusetts also supports 1,039 nurseries, greenhouses, floriculture, and sod farms (Keough, 2014).

Massachusetts has in the last decade emerged as a key contributor to the food supply of New England. What has set the state apart though and is uniquely valuable to the project is that a significant portion of the state’s farm goods is sold in direct-to-consumer method. This is seen by the 28% of the Bay State operations participating in direct-to-consumer practices (Keough, 2014). Most importantly Worcester County is identified as in the top ten counties for value direct-to-consumer sales. Of the farm products produced 13% are sold to retail and 6% are sold through CSAs (Keough, 2014).
With Massachusetts poised as a location to support an increasing trend for local food, the actual success of such a system will depend on the willingness of the parties involved in the Worcester area to work through any issues present in a local farm to restaurant system.

**The Role of Restaurants**

With consumer interest in obtaining fresh products directly from farms on the rise, many new markets have the potential to grow by providing local food. From the statistics presented above about Massachusetts in the 2012 Census of Agriculture, the potential for expansion of local food is poised to support further rise in direct-to-consumer sales through farmers markets and CSAs around the country (Raiford, 2014). It is then possible to see the potential that restaurants serve as an additional direct-to-consumer sale similar to direct sale to retail.

By adopting a locally based food model, restaurants can benefit from attracting customers who are interested in that model as well. (Berry, 2001; Martinez, 2010). Many chefs are willing to consider using local foods primarily for better quality ingredients according to surveys conducted by Hospitality Management Professionals (Sharma, 2014). Better quality ingredients can result in the better tasting dishes that customers want from a restaurant. Outside of this direct benefit, a majority of the surveyed establishments strongly agreed with the statement that, “purchasing locally grown food has a positive impact on my food service establishment’s bottom line.”(Food Processing Center, 2003) This positive financial impact is partly due to the perceived additional value that local food carries, which allows restaurants to charge a premium on these products.

Some chefs have come to realize the response of consumers is not just that they want good food, but that they also want food with a story. Showcasing the benefits of fresher local
food has also shown a positive effect on public relations as customers were interested in eating local. This interest can then lead to higher customer satisfaction in restaurants (Sharma, 2014).

2.4 Difficulties getting local foods into restaurants

The outlook for local food menus looks promising due to higher consumer demand for locally produced commodities, but there remain several concerns and obstacles that have the potential to halt any progress (Halweil, 2002). Previous studies addressing the issue of local foods in restaurants conclude that there are three major obstacles to overcome when developing farm to restaurant relationships: seasonal availability; logistics associated with ordering and delivery; and concerns about obtaining the same quality of product they are accustomed to from large chain distributors.

The first obstacle associated with the supply of local foods is how a restaurant deals with seasonal availability. The climate dictates what can be produced in any one region at any point during the year. Seasonal availability becomes an obstacle as local products are not always available when they are wanted or needed to meet a restaurant’s menu design. To overcome this challenge would require that restaurants remain flexible in food ordering, menu planning, and commit to the adoption of a locally based food model that benefits the local economy and community in addition to the restaurant itself (Berry, 2001; Martinez, 2010).

Another obstacle when using local food is the logistics of delivery in addition to expectations of the restaurants (Aubry, 2013). Several surveys of restaurants highlighted that even above the cost of the product, the delivery of it was most important (Murphy, 2009). The dependability and punctual delivery of local foods is a cornerstone for expanding the reach of local foods in restaurants. There is a need for infrastructure dedicated to the delivery of local
food to restaurants similar to how current non-local food suppliers operate, such as the use of refrigerated transportation, a dependable delivery system, and a user friendly ordering interface. The local product can quickly lose its value if it cannot be delivered and prepared in time for sale in the restaurant. This infrastructure necessary to ensure high standards of delivery can be a significant obstacle for the farmers as they, or third party distributors, will have to bear the costs associated with the distribution of the local foods.

2.5 Farm to restaurant opportunities and challenges in Worcester

There are many groups, including Farm Fresh Rhode Island, Lettuce be Local, and Regional Environmental Council who are trying to find a way to strengthen the relationship in central Massachusetts area between local farmers and restaurants. While these organizations may have a wealth of knowledge about the local farmers, there has not been comprehensive work done with the restaurants of Worcester. These organizations stand to bridge the gap between farmers and restaurants where this relationship is difficult. For example Lettuce be Local is currently working with over fifty farms in central Massachusetts and distributing to 13 restaurants in the Worcester area but it has yet to expand to the several hundred restaurants within the city. The Regional Environmental Council works in conjunction with a couple of restaurants like the One Love Café but the organization is predominantly focused on its food justice mission, developing its Youth Grow Program and Mobile Farmers Market. Farm Fresh RI is local food distributor to restaurants among other things. The organization based out of Providence, RI focuses most of its work in RI and parts of eastern CT. These three key organizations in the surrounding area have yet to take advantage of the large restaurant market in Worcester which could be used to increase local food distribution.
Farm Fresh Rhode Island: Connecting Farms and Chefs

While consumers and chefs may be interested in using more local food, it isn't always easy. Part of the problem is that chefs cannot spend time away from the kitchen driving to pick up orders, and farmers do not always have the time and labor available to make deliveries to restaurants (Farm Fresh RI, 2014).

Many independent organizations, such as Farm Fresh Rhode Island (FFRI) facilitate these transactions for a percentage of sales (Raiford, 2014). FFRI is a 501c3 not-for-profit founded in 2004 that has worked to provide year-round income stability for farmers and increase access for Rhode Island consumers to healthy, locally grown food (Ciampa, 2013). The organization runs a variety of programs including CSAs (Community Supported Agriculture), farmers markets and marketing strategies meant to grow the local food network by building market connections and increasing the demand for local foods among consumers.

FFRI’s Mobile Market Wholesale Distribution Program is a nationally recognized model for a transparent food distribution system (Ciampa, 2013). This program allows customers such as restaurants, stores, employers, schools or hospitals to order from about 50 local producers through a single online system and get the delivery from a single truck (Smith, 2013). Market mobile started out in January 2009 from relationships that FFRI already had with farmers from their wintertime farmers market and a U.S. Department of Agriculture Specialty Crop grant (Ciamp, 2013). Since then, the program has grown rapidly from distributing a single rented truckload of local food a week to an operation that requires a refrigerated warehouse and delivery routes to many areas in Rhode Island and Massachusetts. The streamlined characteristics of their process has been key to the program’s success as it is simple for both
farmers and chefs to use and gives chefs access to higher volumes and variety of products from such a large number of farms. Due to this streamlined process, more commerce occurred between farmers and chefs resulting in a 50% yearly increase in sales to $1.5M in 2012 (Farm Fresh RI, 2014).

This success cannot, however, be solely attributed to the handling of logistics within this relationship. The diversity of FFRI’s programs must be considered as major factors in the implementation of this local relationship (Ciampa, 2013). A prime example of such a program is the local food Guide on the FFRI website. This guide is an online database of farmers and establishments that serve local foods that is maintained made to inform consumers about where to get local foods (Farm Fresh RI, 2014). Database tools like this along with special events and collaboration with producers come together to create a local food network that catalyzes the success of a farm to restaurant relationship.

Central Massachusetts Regional Planning Commission

In Worcester there are organizations that have pioneered local food network development and farm to restaurants relationships in the area. Central Mass Grown, an initiative created by the Central Massachusetts Regional Planning Commission (CMRPC), has begun forming a network of farmers, restaurants and other institutions that want to keep food local. This type of organization will form relationships between producers and buyers to encourage local commerce between the two groups as well as provide an identity that will increase consumer interest in local food.

The CMRPC has been involved in several studies but most notably for our purposes was they conducted a survey of all farms in Worcester Country. The survey looked at specific about
the farm, what was grown, what sales they have, and who they are selling to as well as may other things. The CMRPC received over one hundred responses to the survey helping them get a better understanding of the local farming community. The organization continued their work with local farms recently by releasing their 2015 Farm Products Guide. The guide details farmer’s market, farm festivals, recipes, a produce calendar, and local products.

**Regional Environmental Council**

The Regional Environmental Council, an environmental justice group, has been delivering foods in their mobile market truck from their YouthGrow programs and farms at their farmers markets to a limited number of restaurants in the city of Worcester. In the case of the REC, their stance on environmental justice is the idea that the community should have access to healthy food grown locally, in some cases utilizing previously unused plots of land. The restaurant relationships that the REC has developed mostly consist of personal connections without an organized ordering method or availability listings of their local products (Monteverd, personal communication, 2/2/2014).

**Lettuce Be Local**

Lettuce Be Local is an organization that focuses on the delivery of local foods. Unlike the REC, Lettuce Be Local provides its customers (restaurants) availability listings from nearly 30 farms and has an organized ordering and delivery process (Lettuce Be Local, 2014). Lettuce Be Local has many buyers that have mostly been gained through interest that was generated through social media marketing by the organizations founder, Lynn Stromberg (Houle, 2014). Through the use of social media, those interested in Lettuce Be Local can receive new updates without
Lettuce Be Local spending much time or resources. These organizations come together to fill logistical gaps making the limited farm to restaurant relationships that exist possible in Worcester.

**How to Help Worcester**

Looking at current literature, it is apparent that there is an increase in the amount of local food purchased in recent years (USDA, 2010). While numerous market analyses on the success or viability of local farm to restaurant relationships have been performed in other cities, little research on the topic has been conducted in the Worcester region. It was our goal to provide research that addresses this gap. By investigating restaurants as a potential market for local food, we hoped to better understand chefs’ attitudes about the consistency, delivery and price of local foods and opportunities to strengthen the relationship.
3.0 Methodology

The goal of our project was to investigate restaurants as a potential market for local food. We sought to better understand chefs’ attitudes about the consistency, delivery, and price of local foods and opportunities to strengthen the relationship with farmers. The study used a semi-structured interview protocol to address the following objectives:

- Identify obstacles and key components that restaurants face when sourcing local food
- Assess the potential market for locally produced foods in Worcester restaurants
- Address how local food can be sourced and who is currently distributing local food

3.1 Interviews

Conducting interviews enabled us to have face to face discussions with key stakeholders in the Worcester food network. The purpose of using the interviewing method described in this section was to gain in-depth information about the current state of the business and to get the story behind the experiences that the participant encounters while procuring local foods (McNamara 1999). A general interview guide, Appendix A, was used to ensure that the interviewees were providing information in the same areas while still allowing for latitude in the conversation. The use of the semi-structured interview format also allowed the adaptability for the interviewers to get other relevant information (Valenzuela, Shrivastava 2003). The degree of freedom in using a semi-structured conversational approach for interviews also gave us the opportunity to explore each restaurant’s interpretation of local food.
**Conducting the Interview**

All interviews were conducted by at least two team members where one conducted the interview and the other primarily took notes. Using the interview consent form, Appendix B, to document the permission of the interviewee, we used an electronic audio recording device to capture the interview session for reference while analyzing. The student team conducted the interview by following the question guide that is listed in Appendix A, as appropriate for the party being interviewed.

Each interview started by asking several closed ended questions to open the discussion in order to help put the interviewee at ease. The interview then flowed into open-ended questions that allowed the participants to think and talk for a longer period in order to permit a viewpoint to be more fully developed. The total time spent on each interview varied depending on the length of the conversation, and the time required for transcribing and analyzing the interviews, with twelve hours being the average amount of time for each. Our time was allocated as follows:

- **Preparation – 3+ hours**
  - Research interviewee and/or their associated business. Noted on the interview sheet any particular items of interest to discuss.

- **Interview - 30 Minutes to 1 Hour**
  - Targeted interview completion within half an hour.

- **Documentation – 3+ hours**
  - Transcribed notes from the interview verbatim and recorded any information to be used later

- **Analyze – 3+ hours**
Identified particular comments that fit the goals of the project
Broke transcript into coding for NVivo
Identified information for use in other areas of the project

3.2 Transcript Coding and Analysis

With signed consent from the participant, the interviews were digitally recorded for later transcription. Interviews ranged from 30 min to 90 min in length as all but two participants were interviewed while working and were sometimes interrupted. Depending on the length of the interview, the transcriptions took multiple hours to complete. The transcripts were then compiled into NVivo qualitative research software for coding of themes, phrases, and keywords. We discussed the coding and interviews as a group and saw some trends emerge from the interviews. Although there were some commonalities between the interviews, each participant had their own unique opinion in regards to local food. These trends and opinions were parsed into pre-set codes to begin to identify larger patterns in the interviews (King, 2010). After going through the process of coding some of the data, emergent codes began to appear and were also discussed within the team to determine relevancy to the goals of the project. Coding was then used such that the major themes could be broken into categories, or nodes, to be broken down into the code as seen in the diagram below.
The coding process was done in an iterative fashion both from theme-to-code, and from code-to-theme in an attempt to capture as much content from the data as possible. Later recommendations for the project were linked to the findings through the patterns found while using this process of coding the interview transcriptions (Saldana, 2008).

3.3 Identifying Major Obstacles and Key Components for Restaurants

As noted in the previous chapter, seasonality and distribution inconsistencies are major obstacles to establishing a farm to restaurant relationship. To determine if these and other obstacles are present in Worcester restaurants we interviewed nine chefs and used the semi-structured interview plan that was developed.

In selecting Worcester restaurants we used a stratified sample combined with a purposeful sample.
Stratified Sample of Worcester Restaurants Based on Yelp! Pricing

Limited by four members in the team, only seven weeks with which to gather data, and a reliance on the schedule of restaurants, it was not possible to interview all or a vast selection of Worcester restaurants. To create a diverse sample of Worcester restaurants, we identified three clusters of restaurants based on prices as shown on the business directory website Yelp. Each group of restaurants was generated by filtering a search for Worcester restaurants that serve both lunch and dinner, by each price category denoted by a range of 1 to 3 dollar signs. Breakfast was not included since a large number of restaurants do not serve breakfast. From the filtered results, we took a simple random sample of 10 restaurants from each category by assigning each a number and then comparing selections with a random number generator. Since there were only eight restaurants that were in the ‘$$$$’ category, we were able to make a list of 28 restaurants that we would contact. Of the restaurants contacted we interviewed, One Love Café, Loving Hut, the Flying Rhine, 7 Nana, Livia’s Dish, Volturno, Armsby Abbey, and Nu Café

| Table 2: Sampling of Restaurants in Worcester Serving Lunch and Dinner |
|---------------------------|---------------------------|---------------------------|
| $                        | $                        | $$                        |
| Vietnam Restaurant        | Blackstone Bistro         | Bocado                    |
| DaLat                    | Flying Rhino              | Baba Sushi                |
| One Love                 | Shangri La                | Sole Proprietor           |
| Loving Hut               | La Scala                  | One Eleven                |
| Tacos Parilla Mexicana   | West Side Steak and BBQ   | People's Kitchen          |
| Weintraub's Jewish Deli  | Sakura Tokyo              | Nuovo                     |
| Saigon Café              | Racha Thai                | Ceres                     |
| Jake's Wayback Burger    | Paesano Pizzeria          | 7 Nana                    |
| Bushel 'N Peck           | Cana Restaurant           | -                         |
| Café Neo                 | El-Basha                  | -                         |
Purposeful Sampling

A limitation of the simple random sample was that it did not include a number of restaurants that already source local food. The input of these restaurants was essential to our project because of their past experiences with working with local food and the solutions they created to these sort of problems. To address this issue, purposeful sampling was used as a supplemental type of sampling to take into account the inadequacies of the stratified sample. Our preliminary research showed that two names are prominent when it comes to serving “local” food. The first of these is Armsby Abbey, a restaurant on Main Street that serves food sourced from farms from the north eastern area of the United States and other farms across the nation (Armsby Abbey, 2014). Armsby Abbey focuses on lunch and dinner menus with brunch and alcohol available as well. Volturno Pizza, a restaurant on Shrewsbury Street, specializes in Neapolitan tradition (Volturno Pizza), sourcing their ingredients from a variety of local and long distance locations. Using purposeful sampling, we interviewed: Armsby Abbey, Volturno, and Nu Cafe, which are all known to work with and advocate for local products.

The Interview and Questionnaire

Interviews were scheduled to take place at the respective restaurants and the participants were asked to pick a time that best suited their schedule. The questions listed below are a few examples of what was asked of the chefs during the interview.

- What would you identify as the most important qualities of a food supplier?
- What restricts you from using more or any local food?
- Have you had any challenges with supplying local food to the restaurant?
To confirm and further bolster the findings from the qualitative interview analysis, we utilized a questionnaire, Appendix C, in an attempt to ascertain the most influential characteristics of the supplier and the largest potential hesitations that the restaurants may hold. The Central Massachusetts Regional Planning Commission (CMRPC) has also previously developed a similar type of questionnaire that asked more open ended questions and covered a much broader scope. We reviewed the types of questions being asked by the CMRPC and shaped some of the questionnaire based on their work. The questionnaire was distributed to the chefs at the end of the interview and was split into two main sections about Supplier Characteristics and Potential Problems. The chefs were asked to use a Likert scale for rating each of the statements listed in the sections, on a scale from one to five, one being of no importance and five being essential for them to use local foods. The average rating for each statement was calculated and compared. The statements that scored the highest were representative of the most important attributes to a successful direct farm to restaurant relationship and the biggest potential problems according to the restaurants chefs.

3.4 Assess Demand for Local Food in Worcester Restaurants

Using a stratified sampling method based on pricing and a semi-structured interview format, we sat down with chefs to discuss the following questions:

- Do you currently use locally sourced products?
- Would you be interested in sourcing some of your products locally?
- Do you know of any ways to source local food?
- Do you think that your restaurant is able to handle the challenges of sourcing local food such as the seasonality and inconsistency?
3.5 Address how local food can be sourced and who is distributing it

We wanted to better understand how different distribution methods, such as delivery versus individual pick up, can facilitate a local farm to restaurant relationship. To do this we wanted to evaluate how local food is distributed in Worcester and identify its origins. Listed below are some of the organizations and people who are involved in distributing and promoting local foods in restaurants that we spoke with:

- Brian Monteverd  Regional Environmental Council
- Lynn Stromberg  Lettuce be Local
- Jennifer Huntley-Corbin  Farm Fresh RI
- Hannah Mellion  Farm Fresh RI
- Trish Settles  Central Mass Regional Planning Commission

These existing groups in the area are either in the process of establishing or running their own distribution service specifically for local products. The conversations with Lynn Stromberg and Trish Settles were informal and were meant to help gain some insight to what their organizations are working on. Brian Monteverd, Jennifer Huntley-Corbin, and Hannah Mellion were asked questions similar to the chefs but in regards to their respective organizations. The intent of these conversations was to learn about the obstacles and opportunities that their respective organization had encountered in dealing with restaurants.
4.0 Findings

This chapter will discuss our findings based on the data obtained from the interviews and the analysis of the interview transcripts as described in the previous chapter as well as the results from the tabulated responses of the questionnaire. These findings are organized around the three objectives in our methods chapter.

4.1 Analysis of Questionnaire Responses

When looking at our table of the characteristics of a local food supplier in which the interviewee would rate what they find to be the most important aspect of a local food supplier, there was a relatively neutral to strong emphasis on the importance of each characteristic. These characteristics ranged from the price of food to the availability of products throughout the year. From the 8 responses we were able to collect, we found the arithmetic mean of the responses for each of the characteristics and recorded them into a table that can be seen in Appendix D. From these calculated averages the most important and least important characteristics are easily visible. The restaurants stated that the three most important characteristics were: the quality of the food (rated a 5.00), the price of the product (rated a 4.63), and a tie between the knowledge of products and the ease of ordering (rated a 4.38). Among the responses, the three least important characteristics were found to be the supplier’s knowledge of the restaurant business (rated a 2.38), their flexibility (rated a 3.29), and their effectiveness in communication (rated a 3.63).

Just as with the “Characteristics of a Local Food Supplier” an arithmetic mean using the ratings from each of the 8 filled-out questionnaires was found for each of the categories which were then recorded into the table found in Appendix D. Similar to how they were asked to give
their input on the characteristics of a local food supplier, the interviewee was asked for their input on the obstacles in supplying local food, that is what they perceive as the most difficult part about obtaining local food. Once again the interviewee was asked to rate each part on a scale of 1 to 5, 5 being a critical obstacle. Here each of the 8 interviewees that answered the characteristics of a local food supplier answered about their obstacles. Of the categories presented to them, the three largest obstacles were found to be: the price (rated a 4.75), the consistency of delivery (rated a 4.13), and the food safety (rated a 4.00). Of the same categories, the least important obstacles were found to be: the product diversity (rated a 2.50), the seasonal variability (rated a 2.75), and adequate infrastructure (rated a 3.00).

With this information we are now able to see that from the 8 restaurants who participated in our questionnaire that there are some aspects of either a supplier or some obstacles that are seen as more important than others. In the case of characteristics of a local food supplier it was found that the restaurants placed a high importance on the quality of the food, the price of the product, the knowledge of products, and the ease of ordering; while they stated that they did not care as much about the supplier’s knowledge of the restaurant business, their flexibility, and their effectiveness in communication. Similarly when it came to the obstacles in supplying local food it was found that the restaurants cared more about the price, the consistency of delivery, and the food safety; while not caring as much about the product diversity, the seasonal variability, and adequate infrastructure. While our data isn’t extensive enough to speak for every restaurant in Worcester due to the small number of responses, it can be used to get an idea of what might be important from a restaurant’s perspective without having to rely on guesswork and gives some form of a base for which further research could be conducted.
4.2 The Market for Local Foods in Restaurants

Restaurants want to serve local food as a higher value product but quality can vary compared to non-local produce from wholesale distributors

Of the chefs and staff at organizations such as Farm Fresh that we interviewed, the greatest value that local food had to a restaurant was the quality as compared to commercial products. Chefs strive to produce high quality dishes and our interviews showed that they believe using local ingredients is a way to do it. For example, from Volturno “You’ll get lettuce that’s still warm in the summer… Huge difference, you can tell that these people care,” from Armsby Abbey “Your food will taste a hundred percent better without changing anything,” and from Pure Juz “a lot of the flavor comes out in the juices depending on the quality of the product.” This being said local food is not always what some restaurants are looking for. The quality of local food differs from that of wholesale food products in that it can be less consistent. For example, customers at NU Café became concerned that “the tomatoes come out all different colors.” This unforeseen complication brings up the issue that using local food will not be appealing to everyone.

Restaurants appreciate helping the local economy and local businesses by using local food

Restaurants who want to serve local food for this reason benefit from having a higher value as perceived by their customers, such as being fresher as mentioned when talking with Livia’s Dish. In the restaurant industry the increase in demand for local food could be taken advantage of to generate more business. According to Dante Comparetto the owner of Pure Juz, who tries to use local whenever he can, local food “could translate theoretically to a bigger
bottom line” by attracting new consumers that desire or want to support local food. This is further supported by Chef Damien at Armsby Abbey “I think it helps business, people might not know or care, but once they look at the menu and seeing all this stuff grown from right around here and it’s so delicious I think that helps bring people in.” Local food is often perceived to have better quality and produce food that is tastier, as chef Damian mentioned when talking about local food, “food always tastes remarkably better.” This is important because for the restaurant local food can do more than increase revenue, it can also allow them to produce what they consider better food. This is mentioned in part by Vernice Fouchard from One Love Café in our interview where she states: “I will purchase local if I can get something unusual that is native to the area or something that’s really good.” Here local food has a benefit to restaurants by defining their reputation and giving them a product that allows them to gain access to a niche market.

Through buying from local farmers, restaurants gain access to some great benefits they may not have had otherwise. Armsby Abbey’s chef, Damian claimed they were able to benefit from being close with their farms as they were given “a weekly list of what they (the farms) are doing, what’s coming up, what they are doing, and that’s really helping us out with that and being able to plan menus around that.” This is much like how the Flying Rhino is able to source local foods effectively. The restaurant is able to better plan their menus and have what they want to serve, while the farms are given a loyal (at least in the case of the Flying Rhino) and steady source of business.

The use of local food can influence the surrounding community and economy by creating more connections and business relations. Using local food “supports the local community” stated by Chef Chris at Flying Rhino Cafe, and as Dante of Pure Juz mentioned, “I like the idea
of supporting the local economy, I am very aware of the fact that we can create economic development by creating local economies. And if we are able to keep money local there is a multiplier effect associated with that.” A drive to use more local food in restaurants is progressive and according to Armsby Abbey “starts with a social change,” as in there needs to be a change in “the way people think about food and restaurants,” and this change of thought can be something along the lines of what Jeff at 7 Nana mentioned “that’s where you learn how to be flexible.” A community focused on local food where local food is more available or at least used in their communities also supports local businesses. From Pure Juz “we create economic development by creating local economies.” These local economies would create more business that can take advantage of the increased demand for the product. In this case, with the rise in use of local produce, farms would start to sell more locally if there was money to be made and more groups like Lettuce Be Local or Farm Fresh RI would arise to fill their niche in the economy. This creation of new businesses to fill the niche would allow more farmers to compete in the market and should bring more revenue to the farmers. Hannah Mellion from Farm Fresh RI stated “Every so often one of our farmer’s talks about ‘I was able to buy a new truck or build this new thing on my facility or able to expand or grow their businesses’…I am always really excited that we have been able to create opportunities for people within our organization.” This is evidence that farm to restaurant relationships not only economically supports local agriculture but expands it, and should such a system exist here in Worcester the results may be similar.
4.3 The Obstacles and Key Components of sourcing locally

Many restaurants do not know where to find or how to access local food

One of the major obstacles in serving local food for restaurants was finding and accessing it. We asked Enton of Livia’s Dish, what is the biggest obstacle he faces when sourcing local food? He responded: “Mostly just finding it.” From this and further questioning, we learned he was unaware of any established channels for sourcing food locally in Worcester, whether it was a farmers market or Lettuce Be Local.

Even if chefs are aware of farmers markets which can be found in multiple locations across Worcester, accessing them was an issue for some restaurants. Jeff from 7 Nana stated that “Trying to get up around those times makes it really tough” because as Hannah from Farm Fresh stated, restaurants and farmers operated on “Very different hours.”

Even attempting to source food from a direct farm relationship was found to be a problem as well. For a restaurant to source directly they have to do research that includes contacting and figuring out the logistics of a farm they want to work with. Armsby Abbey tackled this problem by “Looking on maps of where farms were and reaching out to them and explaining who I am.” If the restaurant does not have the resources to do this they often rely upon a distributor. As the chef from the Flying Rhino noted “… [We] don’t have to worry about going through 15 local guys to get all the product [we] need.”

The higher price of local foods compared to those from traditional distributors dissuades restaurants from using them.

While local food can lead to an increased bottom line in restaurants it is seen as a more expensive option than food from traditional wholesale distributors, though this is not always the
The higher price of local food can discourage more pervasive use as ultimately “it all comes down to price” as Hannah Mellion said. More expensive product, for a restaurant, means more expensive the waste as Nu Café argued: “If it goes bad, it’s more expensive.” The cost of local is more of an issue for some businesses than others. For example, Armsby Abbey stated “If you’re used to paying for organic, local or not, or high quality produce it’s really not any different at all.” They also stated “It is more expensive than conventional food, but it’s because there’s a lot more care and work put into it.” This extra care and other factors make local food a valuable, high quality product to chefs regardless of its extra cost. The higher price of local food is often reflected in the sale price for a restaurant, but chefs feel that customers are willing to pay more for meals made with local ingredients. As Enton from Livia’s dish said “It hasn’t been an issue of charging more for the fresh product. They’ll pick up, it’s fresh and understand.” In his restaurant and others, the extra price of a meal that utilizes local food is offset by the freshness and taste of the meal made with local products. Despite better quality, for some, the price of local food still serves as a barrier to some who might wish to adopt its use. There is hope though, as Volturno stated “If the price difference is minimal for local to commercially grown food, I would choose local over commercially grown every single time.” The price of local food will always remain a concern as chefs balance their restaurants ability to charge their clientele more for local foods and the option to pay less for lower quality traditionally sourced ingredients.

**Restaurants can be difficult to even find time to talk with about the use of local food**

When restaurants we intended to interview were initially contacted, several persistent obstacles became apparent. These obstacles limited the scope and number of interviews that could be conducted in the study. Some of the prominent obstacles we found were restaurants
lack of interest in being interviewed, lack of time for an interview, communication difficulties, and refusing to be interviewed. To expand on what we mean by inability to communicate with us effectively, of the ethnic restaurants interviewed, often times the person being interviewed did not know the answer to the questions being posed due to language barriers. Finally, these few obstacles were compounded by the unusual inclement weather during the interview process. The weather in the region forced restaurants to close preventing our scheduled interviews with failure to reschedule the interview.

The difficulties experienced while attempting to contact restaurants is important to consider when evaluating the obstacles of a farm to chef relationship. The majority of restaurants were not willing or able to give thirty minutes to discuss local food with us. This could indicate how challenging it could be for any entity selling local food to develop a relationship with a restaurant due to lack of interest, communication, and time.

**Importance of personal relationships**

While we talked with restaurants, a trend that appeared when it came to sourcing from local farms was the idea that a relationship was valued, if not sought out by some of our interviewees. Jennifer Corbin-Huntley emphasized that developing personal relationships was critical to grow Farm Fresh’s mobile market program. This was later supported when Hannah Mellion of Farm Fresh RI stated that “We have gone to so many new places because the chefs bring us to the new places.” as when a chef moves to a new restaurant, that chef may add the new restaurant to Farm Fresh RI’s network because he trusts and knows what they do. This idea of relationships being a key component extended even further when talking with the chefs of restaurants directly. Chris O’Hara of the Flying Rhino talked about the relationship the
restaurant made with a farmer he works with, stating that “He has taken good care of us over the years so I wouldn’t want to switch. Several places have come here and tried to steal his business and I have stuck with him.” This relationship between the Flying Rhino and their farmer was strong enough, and the product desirable enough, that the Flying Rhino wanted to use something on “their menu and order the item twice a week, he can grow it.” and this has happened in the past and was appreciated greatly by the Flying Rhino. When talking with One Love Café and Nu Café local food was sourced through their personal relationships. Vernice of One Love Café had mentioned that she had found some of her products, her Callaloo juice and others because she had met a farmer at a flea market. In the case of Nu Café, its connection with Lettuce Be Local started thanks to an employee there who had worked with Lettuce Be Local and introduced the restaurant. For these restaurants finding local food may have been difficult if not impossible without these personal relationships, though thanks to people like Lynn Stromberg, food distribution systems can grow at rapid paces.

**Restaurants struggle to overcome the challenges of ordering and delivery that come with sourcing locally**

For a restaurant wanting to start to use local food there is an obstacle in the form of the logistics needed to look into a local food system. Armsby Abbey who utilizes local food mentioned that “the logistics was the most difficult thing in setting up networks,” the issue being finding an efficient way to communicate and deal with local farmers who operate on different schedules than the average restaurant, an issue that Armsby Abbey now deals with through the use of distributors like Lettuce Be Local. When working with a local food system there must be a method for communicating price, availability, and orders. This can be hard for restaurants to
communicate directly with farms as working at a restaurant is very time consuming and restaurants who may not have spare time that lines up with that of a farmer. That being the case, logistical issues can be alleviated at times when there is an existing relationship, as in the case of the Flying Rhino where they have been able to decide to use something on their menu and their farmer would grow it for them.

After finding what they want to use, delivery is another large issue for restaurants when it comes to local food. Some restaurants such as One Love Café prefer to obtain their own foods because they like doing so and “like to see what it is. And know where it’s coming from.” This does not work for all restaurants though as some like Armsby Abbey see it as a “romantic notion that is easier said than done” when it comes to harvesting it themselves or as Armsby Abbey also mentions, “A lot of them are usually, alright come buy some stuff. They are waiting for you to just do it. They want to see that you are interested, because a lot of farmers are kind of skeptical of people who say they want to buy a lot of stuff when they really don’t,” making establishing a business relationship between restaurants and farmers more difficult due to time constraints. While the system of self-pick-up can work for some, others don’t have the time or resources to obtain the product even if they wished to.

**Restaurants may not be able to overcome some obstacles of sourcing locally without the help of a distributor.**

For those who do want to source locally another issue that appeared was the time and effort required to source local foods. To change food ordering practices, a restaurant must invest a lot of time and effort which prevents most restaurants from approaching issues preventing them from sourcing local food. Despite already using local food, Armsby Abbey stated that when it
comes to using local food “It’s a matter of work and effort to do it; it takes extra effort to do.” This puts some restaurants off from sourcing locally such as Pure Juz who would like to use all local food but has issues as “running a business is a lot of work in and of itself and to find the time to actually find the things we need is a lot of work.” These problems are remedied by the use of a distributor as they allow restaurants to easily order any supplies they need. When asked about ordering, Bree from Nu Café explained they have sheets that “has the quotas of what we should have for [each item] and I see if we have that much and order what we need to meet it,” meaning that for her ordering is as simple as seeing how much of a product they need to buy to meet a certain threshold. This is a process that is simple and easy making it ideal for restaurants, deterring them from shifting to an alternative system that does not have an equally easy to use ordering system.

4.4 Ways that Local Food is advertised and sourced

**Mutual marketing can be used to promote access and visibility of local food sources**

One way that the parts of a local food network can all benefit from each other is the idea of mutual marketing. Mutual marketing in this sense is the advertisement of both sides of a relationship, where a restaurant would state the source of products and a seller would also mention who they sell to. With the restaurants displaying who they buy their produce from whether it is the farm or the distributor. As Hannah Mellion put it, “You don’t buy carrots, you buy Four Town Carrots...we try to kind of sell that relationship.” This form of marketing not only conveys the identity, but it develops a form of personal relationship between the restaurant and their supplier, and the advertised support of local food may attract clientele who appreciate such work. As for the actual implementation of this, different restaurants have different methods
such as listing all the farms used on the menu at Armsby Abbey or advertising on Facebook and showing pictures of the staff picking it with Livia’s Dish. The idea of mutual marketing seems to be an issue in Worcester, as Pure Juz puts it, “There is really not that much media in Worcester,” which is further proved by restaurants having problems finding farmers markets.

**Third party distributors are vital to facilitating farm to restaurant commerce.**

Many of the obstacles restaurants face can be solved with the help of third party organizations such as distributors or food hubs, though with these comes additional fees that are normally present with average distributors. A large player in the delivery of local food, Lynn Stromberg, from Lettuce be Local, has been crucial to helping many restaurants source local food. The work Lettuce Be Local has done has been described by Armsby Abbey as “they make it a lot easier for us to get more food locally” and that it’s “much easier than me trying to contact all these people.” With Farm Fresh RI they have an “online ordering system through which people can order food,” and they “do networking, get people to meet and talk to one another” which organizes time for both parties to meet and have some form of relationship building. By doing such activities or being this influential it is possible for more clients to catch wind of these achievements and as Jennifer Huntley-Corbin mentioned, when she was working at Farm Fresh they had “Newport restaurants chomping at the bit” for Farm Fresh to make it down there for them to join in. This easy ordering and access to local food created a more attractive outlook on local food that caused many to want to adopt it, and such an effect can likely be replicated elsewhere.

Furthermore, for the restaurants that aren’t able to form relationships with farms themselves having a third party distributor or coordinator is key to connecting the buyers and
producers. According to Armsby Abbey, Lynn Stromberg from Lettuce be Local, “Has her hands everywhere” and she helped the restaurant source all of the local food it needed, Armsby Abbey further went on to say that, “She’s the funnel for all the farmers so I can work directly with her and say that ‘you have the best that everyone can offer.’” These organizations like Lettuce Be Local and Farm Fresh RI are such integral parts of a local food network and are key when it comes to “building the supply and the demand” as Hannah Mellion put it.
5.0 Recommendations

Our interviews with local restaurants revealed that several businesses already sourced food locally while others indicated varying levels of interest. These differences may be due to individual preferences of each restaurant but it also shows that there is a current demand for local food by restaurants and that some restaurants even commit themselves to sourcing locally. Despite the demand by some, there were still restaurants that did not currently source locally and of these restaurants, their interest was restrained mainly due to perceived obstacles. For Worcester restaurants to be successful in buying local food the following areas must be addressed:

- Ordering and delivery of food must be available and convenient for restaurants
- Restaurants need suppliers to be visible, accessible, and price conscious
- Strategies of mutual marketing are important to add value and inform the community

Using these findings, we made specific recommendations for our sponsor the Regional Environmental Council (REC) for their future work in the local food network.

5.1 Ordering and Delivery of Food must be Available and Convenient for Restaurants

Every restaurant we interviewed mentioned that time was an important factor in the choice of a distributor. This means that most restaurants are not willing to invest much time into ordering or coordinating the delivery of food. These restaurants need a third party that is able to provide the logistics needed for convenient ordering and delivery of the local foods. Lettuce Be Local is currently filling this need for a large number of restaurants in Worcester. Lynn Stromberg, the founder of the organization, has already established clear methods of communication for the
availability of products and easy method of purchase that can be done quickly by restaurants through her email based system. She has even organized a regular delivery schedule that is favorable for restaurants which is one of the biggest obstacles to overcome according to Jennifer Corbin-Huntley who has experience creating a nearly identical program.

Considering the amount of work already completed by Lettuce Be Local, the positive reviews they have received by the restaurants we spoke to and the number of businesses the organization is already delivering local food to, it is unlikely that the REC or any other group would succeed or grow a farm to restaurant distribution service in competition with them. Instead the REC could work with and enhance the distribution capabilities of Lettuce Be Local with a Worcester food hub. This cooperation would provide storage for an inventory of local foods, another centralized distribution center, and the ability to move more product. Storage of products was a major obstacle for FFRI when first developing their Market Mobile program. When warehouse space for food storage was procured and later increased, the volume of food that could be distributed and the number of businesses FFRI could service was greatly increased. Further communication initiated by the REC with Lettuce Be Local could explore the feasibility of a relationship between the organization and a Worcester food hub.

5.2 Restaurants need Local Food Suppliers to be visible, accessible, and price conscious while supplying high quality products

There is a common phrase in the restaurant industry that says, “people vote with their feet.” If an establishment does not provide good services to please their clientele, and if they cannot meet the needs of the customers, then the restaurant would lose out to other businesses as patrons
go elsewhere. While already contending with slim profit margins and the increasing costs of operations, restaurants are continually looking for low cost, high quality options to source food.

Restaurants need highly visible and accessible methods of obtaining local food. This would make it easier for restaurants to be aware of and engage in commerce with a local food distributor or directly with farms. As we found in our interviews, many restaurants do not know where they can buy local food and obstacles of ordering and delivery prevent them from accessing farms directly. To overcome this, emphasis must be placed on informing restaurants about the existence of a local food distributor specifically for restaurants as well as all of the farms interested in work with restaurants directly. This could be done through marketing efforts such as events involving stakeholders in the local food network, being active on social media accounts, and creating literature for restaurants.

Central Mass Grown has already begun marketing local food producers with their Farm Products Guide. This guide contains information on producers in central Massachusetts including their practices, products and contact information. This guide however is rather lengthy and is not organized with restaurants in mind. The REC should work in cooperation with Central Mass Grown to create a searchable website that is user friendly and accessible and which can enable restaurants to discover the farms mentioned in the Farm Products Guide and what those farms can offer them. FFRI has a Local Food Guide that allows restaurants to find all the farms that produce products they are interested in sourcing. This successful guide could be used as a model for the guide in Central Massachusetts. Ensuring restaurants know about all methods of sourcing local food is a vital first step in getting restaurants to participate.

Price was another important factor that was mentioned by all of the chefs interviewed. Local food must be sold at prices that are competitive compared to products from large
distributers and suppliers should also emphasize the higher quality of locally grown foods when informimg restaurants of the services they provide to show chefs the value of purchasing local foods. The REC could help the farms determine pricing by keeping farmers in touch with regional and national trends. At FFRI, farmers set their own price for the products they sell. Then by organizing the available products by farm instead of type, competition is created between farms that sell the same products. Direct relationships between a farm and a restaurant, meaning a relationship that does not involve a distributor, which could potentially come out of the Farm Products Guide, events involving stakeholders and a future website would provide restaurants with a lower cost option for sourcing local food by removing the middle man. This however is assuming that the farms could provide the logistical support that restaurants require as outlined in the previous section.

Even though price is a driving factor for chefs in choosing where to buy, the restaurants interviewed had indicated that a premium for local food was acceptable given the food was high quality. Another factor that will help overcome concerns of high prices is the variety and ability to get specialty products. Two of the chefs specifically mentioned that they have interest in local products for the ability to procure specialty foods. If Lettuce Be Local gave restaurants access to high quality, specialty foods from multiple farms this would be a characteristic that some commercial distributers cannot fill, making it a valuable source of food to the restaurants. Examples of such products would be grass feed beef and pink ginger as referenced by Jenifer Corbyn-Huntley. Other chefs were heavily focused on sustainable practices and saw a “moral advantage” of buying local foods to benefit the local farm economy. Hannah Mellion from FFRI advertises characteristics like quality, unique products and supporting the community to
demonstrate benefits of buying local to prospective customers. These value propositions should also be used by Lettuce Be Local when communicating with prospective restaurants.

In order to maintain low prices for restaurants, any processing or delivery of food must be made as inexpensive as possible to minimize cost transferred to the restaurants. The REC should conduct further research to learn how the cost of local products and their distribution could be minimized, potentially with the help of a Worcester food hub, to enhance the work done by Lettuce Be Local.

5.3 Strategies of mutual marketing are important to add value to products and inform the community

It was stated in our findings that a personal relationship with a food source is a desired characteristic to chefs. Some chefs claimed that they benefit greatly from having a working relationship with a farm as they can learn to cater specifically to each other’s needs. We also found that developing these relationships require significant time and effort so it prevents most restaurants from developing these relationships. Lettuce Be Local must find a means to distribute the foods to restaurants while also developing the restaurants’ relationship with the source of the food in order to maintain the very important personal relationships. Having personal relationships with both restaurants and producers was vital for Jennifer Corbin-Huntley to start FFRI’s farm to restaurant program and continues to be a focus of the program today. Before her work with FFRI she had a radio program that brought on local chefs to talk about the foods created by their respective restaurants and they also talked about the types of foods that they wanted to create. This dialogue allowed the chefs to open a conversation about what was needed and Jennifer saw the opportunity for FFRI to fill the gap. In Worcester, Ginny Sears hosts a
Saturday morning radio show on 94.9 WTAG entitled “The Restaurant Show” where she invites chefs to come on and talk about food. The REC should look to enlist the support of Ginny and others that already have ties to the local restaurant community would be very quick way to reach potential clients for Lettuce Be Local. Blog and column writers could similarly be sought out to act as ambassadors, and they would offer other direct lines to the chefs and consumers in the Worcester.

Avenues for mutual marketing should also be explored through the creation of a “Local Certified” program that lets restaurant patrons know about their food and shows that the business preparing the meals also cares about where the food comes from. This form of branding has been shown to be very successful at sticking in the mind of the consumer. According to a report by Greenberg Research in regards to the “Be a Local Hero” campaign of the Western Massachusetts group CISA (Community Involved in Sustaining Agriculture), 82% of regional consumers recall seeing an advertisement, 44% of regional consumers recognize the slogan, 78% of regional consumers recall seeing a bumper sticker, and a majority of respondents rely more on CISA advertisements about food versus any other local publication. The REC should collaborate with CISA to take advantage of this existing brand that emphasizes the benefits of buying locally grown food and advance it by using the aggregation dimension of the distributor to showcase the value that comes from having many local farmers’ goods through a single service. A brand that gives restaurants access to products from many farms would then need to make the restaurants feel like they have a relationship with the farms by conveying the origin of the food. FFRI does this during the ordering process, as previously mentioned by organizing product by farm so the restaurant knows where they are buying from. This allows restaurants and their clients to trace the origin of the food and should be used by Lettuce Be Local in the ordering system. The
creation of an online guide by the REC with information on each farm, including its practices and products, that the distributor sources from would also aid in the promotion of the relationships Lettuce Be Local has with farms and how restaurants could benefit from its services.

5.4 Key questions the Regional Environmental Council must ask

Our research has left us with a number of unresolved questions that should be addressed if the REC plans to put the recommendations we have outlined into practice. Many of them require further research and should be included in the REC’s feasibility study on a potential Worcester food hub. Other questions may simply be answered by communicating with leaders of organizations promoting local food as well as producers of local products.

- Is a food hub necessary for farm to restaurant local food distribution considering the success Lettuce Be Local has experience without one? Can the sales of local foods to restaurants support a Worcester food hub? If not are there other ways to market local food that would support a food hub or supplement the efforts of a farm to restaurant program?
- By what means can the REC collaborate and communicate with key the stakeholders involved in promoting and distributing local food? How can Central Mass Grown, Lettuce Be Local, and the REC align their goals to work together effectively?
- How can the REC help farmers overcome the obstacles of supplying a food hub and restaurants? What is expected of farmers in terms of logistical support in the ordering and delivery process?
• How can a food hub with a social mission ensure viable farmer incomes while providing affordable food to restaurants?

• Is there enough consumer demand for local food in Worcester to ensure the success of restaurants that source locally? What can the REC do to increase demand for locally sourced food in consumers, specifically to increase business for restaurants?

These questions are meant to give the REC an understanding of unexplored components of the farm to restaurant relationship so all involved organizations can approach the challenge of fostering these relationships while considering each part of the process from producer to consumer. To ensure success, the questions must be researched before the following suggested tasks can be carried out; development of a food ordering and delivery system with a food hub, creation of a marketing plan and local food guide geared toward restaurants, and collaboration with other organizations to complete these tasks. Using these recommendations, the REC will be poised to increase the use of local food in Worcester restaurants and further its food justice mission by making local food more available to restaurants.
References


Valenzuela, D., & Shrivastava, P. Interview as a Method for Qualitative Research.

Appendix A: Semi-structured Interview Plan for Interviewing Restaurants:

1. **Introduction** - Introduce ourselves and the farm to chef project team:

   Thank you for taking the time to speak with us today. As you may know from when we spoke about setting up this interview, our team from WPI is doing a research project sponsored the Regional Environmental Council, REC. The goal is to research the demands for local foods in Worcester and the networks in place to support the restaurants and farms involved. Through this project we are:
   - Assessing the demand for locally produced foods in Worcester restaurants
   - Determining the obstacles that prevent restaurants and/or farms from participating in a collaborative network
   - Identifying the characteristics of a successful farm to restaurant relationship in Worcester
   - Making recommendations to the REC about how they may help build and/or strengthen these relationships

   This interview will probably take about 30 min and will consist of some open ended questions about how you currently use local foods and the potential to make the local food network stronger. Before we begin talking about some of the questions, would you mind reviewing this consent form? It explains that we would like to audio record this interview and that if for any reason you do not want your name, or the name of your business listed in our report, please check the appropriate box. We can email you a copy of the form if wanted, and if you have any questions later on, please feel free to contact us or our advisors (Hand interviewee the contact sheet and the consent form. Take the time to answer any questions).

**Interview Questions**

For the first part of this interview, let’s discuss food.

1. Do you currently use local foods (food that has traveled less than 50 miles)?
   - Yes
     a. What local foods are you using?
     b. How are you typically sourcing them?
     c. Do you use any specialty foods (ie international, scarce, uncommon, …) ? How are they sourced?
     d. How are your local foods most commonly used (apps, entrees, garnish, …)?
     e. Were there any obstacles you faced in sourcing local foods? 
     f. Have you seen any benefits from using local foods?

2. Do you use local foods?
   - No
     a. How do you currently source your food?
     b. Do you use any specialty foods (ie international, scarce, uncommon, …) ? How are they sourced?
     c. What obstacles do you perceive to influence local food?
d. Have you had any experience sourcing, preparing, or marketing local foods?
e. Would you have any interest in using local foods in the future?
f. Is there any reason why you would not use local food?

3. Characteristics of local food consumers
   a. How do you convey information about food to the customers (i.e. nutritional content, source, history, thoughts about the dish, …)?

4. Defining an Ideal local food supply for restaurant
   a. What would you need to be true for you to use local foods?
   b. Do you see any benefit in using local foods?
   c. What ways could the distribution of local food be better for you?
Appendix B: Interview Consent Form

**Interview Consent Form**

<table>
<thead>
<tr>
<th>Project title</th>
<th>Connecting Local Farmers and Chefs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WPI - Interactive Qualifying Project</td>
</tr>
</tbody>
</table>

Interviewers

Interviewees

Business Type

Location

Date

This WPI IQP research project is sponsored by the Regional Environmental Council to explore the demand for local food in the Worcester food network of farmers and chefs.

The goals of the project are to assess demand for local foods, determine obstacles in the local food network, identify characteristics of successful relationships, and make recommendations to the REC about how to help build and strengthen these relationships.

All information gained in this interview can be made anonymous at your request. All audio recordings and transcriptions will be retained as property of WPI unless otherwise noted below.

A copy of the final report will be made available when completed and approved by WPI and the REC.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I give my permission for...</td>
</tr>
<tr>
<td></td>
<td>this interview to be (audio/video) taped</td>
</tr>
<tr>
<td></td>
<td>my name to be used</td>
</tr>
<tr>
<td></td>
<td>the tape/transcript to be archived</td>
</tr>
<tr>
<td></td>
<td>the information made public</td>
</tr>
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</table>

(Signature of Interviewee)  (Date)

(Signature of Interviewer)  (Date)

All questions regarding this project can be directed to
Professor Robert Hersh
508-831-5522
hersh@wpi.edu
Appendix C: Chef Questionnaire: To be administered before the Interview

Chef Questionnaire:

Characteristics of a Local Food Supplier:

For each of the following categories rate their importance to you based on the set of five responses where 1 = “not important at all” to 5 = “critical.”

<table>
<thead>
<tr>
<th>Characteristic</th>
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<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
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<tr>
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</tr>
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<tr>
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<td>O</td>
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</tr>
<tr>
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</tr>
<tr>
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<td>O</td>
</tr>
<tr>
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<td>O</td>
<td>O</td>
</tr>
<tr>
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Obstacles in Supplying Local Food:

Just as above, for each of the following categories rate their importance to you based on the set of five responses where 1 = “not a problem at all” to 5 = “a serious problem.”

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<tr>
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</tr>
<tr>
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<tr>
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## Appendix D: Questionnaire Responses

### Characteristics of a Local Food Supplier

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### Obstacles in Supplying Local Food

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Appendix E: To Obtain Interview Transcripts

Interview transcripts can be made available by contacting Professor Robert Hersh (hersh@wpi.edu) or Professor Suzanne LePage (slepage@wpi.edu) from the Worcester Polytechnic Institute.