Understanding the Saratoga Springs Local Food System: An Analysis of its Local Food Markets

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Introduction

In today's globalized world there exists a global, conventional food system and an alternative, local food system. Historically food was primarily consumed close to the place of production; however since the Industrial Revolution, food production centers have become increasingly disconnected from consumers and communities with the help of urban and suburban sprawl (Hein et al. 2006; King et al. 2010). This trend gave rise to today's conventional food system—a large-scale system reliant on mechanized mono-cropping, chemical inputs, global sourcing and marketing strategies, and long distances between production and consumption—which was designed to ensure quantity, variety, and convenience to the American consumer (Gasteyer 2008; King et al. 2010). In recent years "local" has become the new phenomenon in the food sector. While local farms continue to face difficulties, such as development pressure and competition with large corporate farms and uneven subsidy allocations, the 2007 Census of Agriculture showed that there has been a slight national increase in the number of small farms (Pothukuchi et al. 2010; King et al. 2010).

In 2009, the agricultural sector was responsible for six percent of the total greenhouse gas emissions in the United States, however it accounts for 68 percent of United States' nitrous oxide emissions (2011 US Greenhouse Gas Inventory Report). Additionally, conventional system's food is imported and exported, which increases the transportation distance and time--adding to greenhouse gas emissions. In order to keep up with demand and to ensure that the food retains its quality during transport, conventional agricultural practices rely on chemical use—which includes the use of fungicides, insecticides, herbicides, nematicides, insect growth regulators, fumigants and repellants. Evidence shows that undesirable side effects of chemical use are widespread, including injury to non-target organisms, imbalance in affected ecosystems, damage to topsoil and future agricultural productivity as well as contamination of the environment by persistent toxic substances (Igbedioh 1991). The conventional food system also faces the problem of unlabeled GM foods. Studies have been too few and controversial to determine how GM crops may affect the environment, biodiversity, and human health (Conner et al. 2003).

Local food systems and the local food movement in general, have largely arisen as a reaction to America's economic and political institutions, which tend to favor the large farm and a globalized food system. The major deficiency with the conventional food system is a lack of transparency as it often fails to address consumer concerns about it's foods' relations with climate change, and the aforementioned chemical use, and unlabeled genetically modified (GM) foods. These major issues all affect the quality, safety, and security of food, human and environmental health. In response, the local food movement is expanding to address this lack of transparency.

The Growing Local Food Movement

Increasing awareness of issues of the conventional food system have led to an increasing demand for a food system that acknowledges humanitarian, environmental, economic and health safety and security issues, as well as credence qualities such as aesthetics and taste (Bougherara et al. 2009). The local food system is defined by shorter transportation distances, closer relations between producers and consumers, and the existence of local food purchasing venues such as farmers' markets, community supported agriculture programs (CSA) and food cooperatives (Gasteyer 2008; Jarosz 2008). According to the USDA, farmers' markets account for less than two percent of the more than $70 billion Americans spend on produce annually. However, the growth of alternative food networks has accelerated in recent years. Distribution outlets are increasingly marketing local food, and the number of CSAs has grown from 50 in 1990 to over 1,500 today; and the number of farmers' markets has increased from 1,775 in 1994 to 4,385 in 2006 (Hardesty 2008). Therefore, it has become increasingly important for communities to understand their local food systems and its potential for expansion.

A major issue impeding the growth of local food sales is a lack of information. In a 2008 study regarding local food success in restaurants in Nevada, producers identified an interest in supplying restaurants with local products; however, the majority of farmers were unsure about how to enter this market. Similarly, the same study showed that the restaurant owners and chefs also indicated a lack of information as the main obstacle of forming local partnerships (Curtis et al. 2008). This lack of information is not only an issue for restaurants, but also for other potential markets. In order to break into the local food market, distribution centers need an understanding of their local food system and how to successfully form partnerships with local producers. Knowledge of restaurants' cost of local food use, as well as the demand and sales of local foods in supermarkets and farmers markets, can help provide the information needed to expand upon the current food system (Strohbehn 2006).

The expansion of the local food system is also hindered by the unequal distribution of government subsidies. Some government policies limit the local food system by allotting a disproportionate number of subsidies to the conventional food system, which reduces diversity in the food system (Follett 2009). According to an analysis by the watchdog organization Environmental Working Group in 2006, among the 1.1 million farms that stood to gain from the Senate Appropriations Committee's proposed emergency funding legislation, the energy assistance bonus was skewed toward the largest enterprises. Four-seven major commercial farms received aid payments exceeding $100,000" (Chen 2007). Other problems facing the expansion of the local food system and the viability of small farms can be contributed to a current food culture built on price and convenience. This creates a market based on economics rather than greater considerations of choice, welfare and sustainability (Follett 2009). Some of the most commonly mentioned barriers to buying local include: concerns about USDA certification and insurance as well as convenience and consistent quantity and quality (Hultine et al. 2008).

While the local food system has many benefits, there are also many unresolved issues. There is some debate about whether or not local food is of higher quality and freshness than food sourced from farther distances (Hinrichs 2000). Efficient transportation now decreases the lag time between harvest and arrival on store shelves and the limited number of studies on local foods makes it impossible to state whether or not local is more environmentally sustainable (Edwards 2008). Finally, supporting local agriculture increases the need for development and infrastructure, which raises questions about aesthetics, zoning laws and environmental impacts (Edwards 2008). While we acknowledge that there maybe some debate about local foods, the focus of this study is to analyze the emerging local food system (Edwards 2008).

Despite the barriers the local food system faces, demand is becoming prevalent, particularly in cities (Jarosz 2008). The consumer trend towards local food is reflected by increased "buy local" campaigns and has even resulted in large chain stores such as

Wal-mart looking to distribute local foods. This results in another problem hindering the expansion of local food systems—a lack of infrastructure (Edwards 2008). In order to meet the demand of large retailers like Wal-Mart, small, local farms require access to capital in order to invest in farm equipment, composting infrastructure, washing and cooling facilities, delivery trucks, and most importantly the ever more expensive land (Philpott 2006).

Evolution of the Concept of Local "Foodshed"

One way to analyze the local food system is through a foodshed analysis, which established a ceiling for how much local food can actually be produced. Over decades, the term "foodshed" has continually evolved to reflect different studies. It was first coined by Walter Hedden in the 1929 book *How Great Cities Are Fed* to answer: "where is our food coming from and how is it getting to us?" (Kloppenburg et al. 1996). Decades later in 1996, Kloppenburg and fellow researchers drew upon the "foodshed" concept and defined it as a term to "encompass the physical, biological, social, and intellectual components of the multidimensional space in which we live and eat" (Kloppenburg et al. 1996). Then in 2008, American Farmland Trust defined the term "foodshed" as food sourced in farms and ranches within a 100-mile radius from the Golden Gate Bridge in San Francisco, CA (AFT 2008). Finally, the term foodshed progressed into a 2009 study, in which, it was defined as the geographic area from which a population center derives a portion of its food supply from a relatively local area (Peters et al. 2009).

Research Area: Saratoga Springs, NY

In 2005, New York State agriculture was a 3.6 billion dollar industry, and the state is ranked third in dairy production and seventh for produce sales (USDA 2010). Our research focuses on the area of Saratoga Springs, New York. Saratoga Springs is a small urban center of approximately 29,000 residents with a median household income slightly over the national average. It is a prime case study for this project as it is located one of the fastest growing counties in New York State, but it also currently has 641 farms and 75,550 acres of agricultural land surrounding the city (Saratoga County Profile 2009). Also, Saratoga Springs has the potential for local food growth because its local food system has become more visible in recent years with a bi-weekly summer farmers' market, several local foods based vendors and restaurants, and CSA opportunities.

Research Focus

There is a lack of studies that analyze local food systems and how the system functions, therefore it has not been proven the local food system is better or worse than the conventional system. Thus, the goal of our capstone project is twofold. First, we assessed the composition, trends, and consumer profile of local foods by interviewing local supermarkets, farmers' markets, restaurants, specialty food stores, and direct to customers. Second, we tried to better understand what the barriers are to increasing the sales of local foods. We did this in order to establish the current status of the Saratoga Springs local food system and answer the question: is the local food system in Saratoga Springs successful, and how can it be expanded?

Methods

In order to answer: is the local food system in Saratoga Springs successful and how can it be expanded, we have defined two objectives: identify the existing conditions of Saratoga Springs' local food system and investigate how large the local food market is and explore the potential for the local food system to expand in the future. To accomplish this, we required more than a foodshed analysis. The foodshed analysis was useful to establish a ceiling for the local food system; however it does not answer the question of how the system works and how it can be expanded. Therefore, our study fuses two methods: 1) a foodshed analysis and 2) market analyses of five major distribution markets: supermarkets, farmers' markets, restaurants, specialty food stores, and direct to consumer.

Our primary methods were market analyses because this allows us to understand how the local food markets work and how each connects with producer and consumer. To do this, we conducted semi-structured interviews with distribution outlets. Additionally, we preformed a consumer survey and a market assessment of the Saratoga Farmers' Market to supplement these interviews.

We interviewed 11 local food distribution outlets found in Saratoga Springs or that supply local food to Saratoga Springs. We chose to focus on distribution outlets because through one intermediary venue, we could incorporate the farmer and consumer perspectives. From our five distribution markets, we interviewed two case studies from each because we knew or suspected that local foods were sold. Since there is only one case study of a farmers' market in Saratoga Springs, we chose to interview the Ballston Spa Farmers' Market as well. The following is a table of the distribution outlets that we interviewed:

<table>
<tr><th colspan="6">Case Studies of Distribution Outlets Around Saratoga Springs</th></tr>
<tr><th>Outlet Type</th><th>Farmers' Market</th><th>Restaurant</th><th>Supermarket</th><th>Specialty Food Store</th><th>Direct to Consumer</th></tr>
<tr><td rowspan="3">Case Study</td><td>Saratoga Springs Farmers' Market</td><td>Beekman Street Bistro</td><td>Price Chopper</td><td>Four Seasons</td><td>Saratoga Apple</td></tr>
<tr><td rowspan="2">Ballston Spa Farmers' Market</td><td>Mouzon House</td><td rowspan="2">Hannaford's</td><td rowspan="2">Putnam Market</td><td rowspan="2">Kilpatrick Family Farm</td></tr>
<tr><td>One Caroline Street Bistro</td></tr>
</table>

Table 1: This table shows the five categories of distribution outlets and the case studies from each that we interviewed. All case studies are located in Saratoga Springs except for Ballston Spa Farmers' Market—that we interviewed in order to compare to the Saratoga Farmers' Market—and Saratoga Apple and Kilpatrick Family Farm, both of which sell direct to consumer in Saratoga Springs.

Foodshed Analysis

Our first objective was to identify the existing conditions of Saratoga Spring's local food system and investigate how large the local food market is in order to shed light on and connect a system that underlies the infrastructure of the city. Acknowledging the different uses of foodshed, we define the existing local foodshed as: the geographic area from which a city's local food distribution outlets supply some portion of its food supply. We established a ceiling for the distribution outlets that we interviewed using Geographic Information Systems (GIS) to locate the distribution outlets and their farm partners in order to create a macro visual of the local foodshed. By defining what the local foodshed was, we established a baseline from which we can refer to in order to point out the areas that are successful and can be expanded, as well as the system's obstacles.

Market Analyses

To examine the system on a micro level, we simplified the retail value chain of the local food system into three parts: the producer, distribution outlet, and consumer; and conducted interviews with 11 distribution outlets in Saratoga Springs in order to collect information on what their definition of local is, what the consumer base is, if local foods are economically successful, what the percentage of local food sales is, what obstacles are faced when trying to use or sell local food, and recommendations about how the local food system can be improved (Jarosz 2008, Mellor 2009). Additionally, we obtained the farmer and consumer perspectives of the local food system by asking questions about what the distribution outlet's connection with farmers are and what the consumer demand is (Appendix 1 for interview questions). Also, at the Saratoga Farmers' Market, we conducted a Rapid Market Assessment (Appendix 2 for questions), which was composed of five questions where farmers' market consumers used a dot survey to answer basic questions about the Saratoga farmers' market—such as the average amount of money the consumer spent at the market on the study day (Cooley and Lass 1998; Lev et al. 2004). Finally, we used an online consumer survey (Appendix 3 for questions) to identify some of the major obstacles to expanding the local food system (Jarosz 2008). Our interviews with the direct to consumer distribution outlets, Kilpatrick Family Farm and Saratoga Apple, doubled as distribution outlets and a producer perspective because they are also two successful, year-round farms.

<table>
<tr><th colspan="4">Summary of Methods</th></tr>
<tr><th></th><th>Producer</th><th>Distribution Outlet</th><th>Consumer</th></tr>
<tr><td>Major Method</td><td>Interviews</td><td>Interviews</td><td>Surveys</td></tr>
<tr><td rowspan="9">Case Studies</td><td rowspan="4">Kilpatrick Family Farm</td><td>Saratoga Springs Farmers' Market</td><td rowspan="9">Saratoga Farmers' Market Consumers' Survey and Rapid Market Assessment</td></tr>
<tr><td>Ballston Spa Farmers' Market</td></tr>
<tr><td>Beekman Street Bistro</td></tr>
<tr><td>One Caroline Street Bistro</td></tr>
<tr><td rowspan="5">Saratoga Apple</td><td>Mouzon House</td></tr>
<tr><td>Four Seasons</td></tr>
<tr><td>Putnam Market</td></tr>
<tr><td>Hannaford's'</td></tr>
<tr><td>Price Chopper</td></tr>
</table>

Table 2: This table summarizes the method that we used along the retail value chain of producer, distribution outlet, and consumer. Interviews of case studies were the primary method, but an online survey of Saratoga Farmers' Market consumers and a Rapid Market Assessment of the Saratoga Market supplemented these interviews.

Analysis: Part One

Through our research and our interviews with 11 distribution outlets representing five categories, the Saratoga Springs local food system has become a clearer entity. In Part One of the analysis, we present our case study results and discuss the five distribution outlet markets of the local food system (See Appendix 4 for a list of farm partners for each distribution outlet). Part Two analyzes the system as a whole by comparing the distribution outlet markets and aspects for market expansion.

Supermarkets: Price Chopper and Hannaford

Hannaford and Price Chopper represented the supermarket category in our study because they are the two major supermarket chains around Saratoga Springs. We interviewed Rick Stauffer, a Hannaford store manager, and Megan Collins, a Price Chopper produce employee. The local food market in both stores has increased slightly in recent years, despite the economic recession, as consumer demand has increased in part because of 'Country of Origin Labeling' (COOL) requirements under the 2002 and 2008 Farm Bills (USDA 2010). Both supermarkets' agreed that local means within New York State, although Price Chopper's operating definition is more lenient. Both markets partner with larger, more established farms in order to meet their consistency and quantity needs. As a one-stop shopping destination, supermarkets have a wide range of customers, but in general, the typical Saratoga Springs customer is wealthier and more educated than the average American consumer (Stauffer pers. comm. 2011).

Structurally, the two supermarkets differ in certain respects. Hannaford regularly contracts with five to ten larger farms depending on the season and these partnerships are formed by Hannaford's contacting local farms or vice versa. Price Chopper on the other hand contracts with one to two large farms at a time and it seeks out its partnerships. While Price Chopper did not provide much information on the subject, Stauffer explained that Hannaford helps producers with packaging requirements, delivery, and in general is as flexible and accommodating as possible.

While sharing some marketing practices, the two supermarkets have taken different routes for advertising their local food connections. All Hannaford stores adhere to the same marketing scheme, their "Close to Home" program, which defines local as within New York State. Conversely, Price Chopper's partnerships with local producers vary from store to store. While Price Chopper has minimal advertisements for their local connections in store flyers, Hannaford has a well-established bi-annual magazine, which features interviews with their local producers. Both supermarkets also feature local farmers at stands during the summer.

Finally, the major obstacles to expanding the local food market in supermarkets include: ensuring consistent quantity and quality of the local product, which often correlates to a preference for more well established and larger farms; perishability of local products; difficulty dealing with fluctuations of supply and demand; a desire for consistency when featuring a single farm for one product; and problems with seasonality (Stauffer and Collins pers. comm. 2011).

Supermarkets have perhaps the most potential for growth as a local food distribution outlet. Supermarkets sell the most volume produce among our five categories averaging around $12,000 in produce sales daily, and with an average of 2,150 customers per day (Stauffer pers. comm. 2011). Also, with COOL requirements, it appears that these commercial markets are seeking more local food. This is due to the resulting increase in consumer awareness about product origins, which cues larger issues of international food safety (Collins pers. comm. 2011).

Supermarkets are able to source more local food during the summer season; however produce sales decrease at this time due to competition with other markets and consumers' ability to grow their own food. Supermarkets also benefit from buying local because they can buy high quality produce at wholesale price from the farms, and the farms usually deliver multiple times a week. For the consumer, the supermarket is the most convenient distribution outlet because it is a one-stop shop and it has lower prices than the farmers' markets—so more people can afford good food. From a producer's perspective, selling to a supermarket is more of a way to move and promote their product then a way to make top dollar, since they are selling at wholesale prices. Finally, the amount of local sales in a supermarket is at best around 30% of overall produce volume; therefore, supermarkets have plenty of room to grow. It would appear that with COOL, a consumer demand for local, and infrastructural changes, there might be an increase in the amount of local food supermarkets buy and sell.

Farmer's Markets: Saratoga Farmer's Market, Ballston Spa Farmer's Market

Through our interviews with Suzanne Carreker-Voigt and Cyndi Pastore, the market managers of the Saratoga and Ballston Spa Farmers' Markets respectively, we found that farmers' markets are central to the whole local system. While small in comparison to supermarkets—about 500 customers a week at a winter market—these markets are essential to the success of local foods. As will be discussed later, restaurants and specialty food stores rely on these markets to source a percentage of their local foods. Some farm vendors at the market also bring their CSA food shares and sign-up information to the market (Kilpatrick pers. comm. 2011).

The farmers' markets had different definitions of local: Saratoga held that local means within a 50-mile radius of Saratoga Springs, while Ballston Spa defined local as anything made or grown by a vendor or anything which furthers a local business. The Saratoga Farmers' Market allowed in two vendors outside the 50-mile radius under the rationale that these vendors were the closest sources for the products desired. Both markets say that the typical customer values quality, transparency and the social relationship forming aspect that the markets provide. The Saratoga Market placed more emphasis on customers wanting to support the local economy and farmer. The Ballston Spa Market also believes that customers come to the market for educational purposes—to learn new recipes and to learn how to use the products.

Financially, Saratoga Farmers Market does better in the winter with a record in charge sales of $4,500 on November 20, 2010, as opposed to its summer average of $1,800 in charges twice a week. The Ballston Spa Market shows opposite trends; its stronger season is the summer. The markets have different types of management entities: the Saratoga Farmers' Market has a producer board called the Saratoga Farmers' Market Association and the Ballston Spa Market is run by the Ballston Spa Business and Professional Association. As a consequence of these different management structures, the Saratoga market has higher vendor fees, while the Ballston Spa market only requires an annual membership fee of $125. The Ballston Spa Business Association also handles Ballston Spa Farmers' Market marketing and advertising costs while the Saratoga Market pays for its own ads in newspapers, radio stations, and various websites.

Both markets cite convenience as a problem for expansion. Many people want one stop shopping and weekly markets are not convenient for the average customer. The Saratoga Farmers' Market is very competitive and with a constant waitlist and the threat of competition within the market, the farmer run board is averse to expanding the market further. If it were to continue to expand, farmers would be forced to sell below retail value and set wholesale prices. The Ballston Spa Market says that farmers need to be more educated on how to successfully market and run a business (Pastore pers. comm. 2011). However in general, the prices, location, variety, times, and hours of the farmers' markets can also be obstacles.

Rapid Market Assessment

To supplement our interviews with Carreker-Voigt, we ran a Rapid Market Assessment (RMA) and online survey where we evaluated the demographics and values of the customers (See Appendix 5 for the online consumer survey results). Many of the questions were aimed at gaining a better understanding of the success of local foods within the community and the market itself. During the RMA, we found that 500 customers attended the Saratoga Market on February 19, 2011. The busiest time at the market was between 10am-10:30am and 60% of the customers were from Saratoga Springs. About 40% of customers spent over $30 at the market that day.

Farmers' markets and direct to consumer market pathways both sell retail price for their products, which provides them with the best profit for their products. Additionally, all food items sold through farmers' markets are local; however different farmers' markets are not standardized and they all operate differently—as seen in the contrasts between Saratoga and Ballston Spa Farmers' Markets. These markets are venues for independent businesses to sell their product directly to the consumer. While farmers' markets provide a variety of products for the consumer to choose from, thereby attracting more consumers, the markets can charge steep vendor fees and inclusion is very selective which can result in higher prices for the consumer (Carreker-Voigt, Darrow, Kilpatrick pers. comm. 2011).

Restaurants: Beekman Street Bistro/One Caroline Street Bistro and Mouzon House

Saratoga Springs is home to many restaurants, however only a few have significantly tapped into the local food market. We interviewed Tim Meaney, owner of

Beekman Street Bistro, and David Pedinotti, owner of One Caroline Street Bistro and Mouzon House. Both of these restaurants are very committed to local and Pedinotti stated that he "would not have a restaurant if [he] did not do it this way" (Pedinotti pers. comm. 2011). Meaney and Pedinotti both agreed that local means within 100 miles or within New York and surrounding states (Pedinotti and Meaney pers. comm. 2011). When these restaurants were established they both immediately sought out local farm partners. Both owners believe that the majority of customers do not solely choose their restaurants because they are locally sourced, but rather because of the quality and taste of the food. Because of the high quality food, the owners have repeat customers; however the typical customer of these three restaurants is financially stable and older. (Pedinotti and Meaney pers. comm. 2011).

Both restaurant owners market their farm partners on their menus and consequently, the restaurants' menus change seasonally to reflect what food is available. Meaney and Pedinotti both expressed difficulty with external marketing due to the extra cost. As buying local is expensive compared to sourcing from large distributors, Meaney and Pedinotti cut unnecessary expenditures wherever they can. Both restaurants rely primarily on word of mouth as a marketing tool. Despite the current economic recession and a period of struggle for the fine dining sector, both restaurants have remained in business (Pedinotti pers. comm. 2011).

Beekman Street Bistro and One Caroline Street Bistro/Mouzon House rely on strong relations with the Saratoga Farmers' Market for a percentage of their local food. Meaney picks up his weekly order wholesale from the farmers' market every week before market opens; while Pedinotti supplements his local supply by visiting the market from time to time and picking from the leftovers. During the summer peak season both restaurants are upwards of 90% local. However, seasonality is a great obstacle for restaurants and in the off-season, the restaurants are only able to source approximately 75% local. (Pedinotti and Meaney pers. comm. 2011). Lastly, sourcing local requires more time and effort. Restaurant owners have to contact each farm separately, travel to farmers' markets and prepare unprocessed, raw food.

Producers who partner with restaurants can sell excess product from the farmers' market to the restaurant. However, according to some producers, restaurants (not those in our study) can be financially unreliable, neglecting to pay farmers for their crops. Both restaurant owners noted that they have very few problems with local farms being consistent in quantity, quality and delivery of food. With fresh, quality ingredients, and the value added in cooking and presentation, restaurants have the ability to mark up prices for prepared dished; yet restaurants still have to manage on a tight budget. The consumer has to pay a higher price for local food in restaurants, which means that a local food restaurant is not an outlet that customers frequent every week, if at all. However, the customer is paying for local ingredients, the preparation, service and atmosphere (Meaney pers. comm. 2011).

Specialty Food Stores: Putnam Market, Four Seasons

Putnam Market and Four Seasons were both chosen for this study because we knew or suspected that they at least had a minimal commitment to local food. Store owners Cathy Hamilton from Putnam Market and Richard Frank from Four Seasons provided information about their markets.

Both stores' local supply has grown in recent years as they have developed stronger ties with local producers and as there has been an increase in consumer demand. Compounded, these two factors have led to an increased availability of local foods; however 'local' represents a small percentage of both stores' overall sales. In practice, both Putnam Market and Four Season's define local as within Saratoga and surrounding counties, yet both stores' definitions were vague until the end of the interviews. According to these definitions, Putnam Market partners with an average of ten medium sized farms, while Four Seasons has formed strong ties with six farms of comparable size. Both markets source similar products including certain produce and dairy, but while Putnam Market has a larger emphasis on dairy, Four Seasons sources local meat products. Four Seasons and Putnam Market do little to market these local products; however Frank labels food that is produced within Saratoga and surrounding countries and Hamilton talks to customers about the store's local ingredients for the purpose of helping the associated farmer. For both markets, the average customer is well-educated, often female and values local not simply for its intrinsic worth, but also because local usually implies superior quality and nutrition (Hamilton pers. comm. 2011).

For reasons of convenience and cost-effectiveness, most of both markets' food is supplied by big operations. Yet, Hamilton and Frank both believe that buying local provides huge incentives for forming strong community relationships. This presents an obvious contradiction, which leads to obstacles for the expansion of local in these specialty stores. First is the problem of seasonality in the off-season and produce sales decreasing in the summer as a result of competition. The high price of local is also an important factor in the hindrance of forming more local connections. Adding to problems with price are issues with consistency and quantity, and reliable delivery. Other obstacles include problems forming partnerships and perishability of local products. As transportation continues to get cheaper, Frank also sees this as an obstacle to the growth of local (Richard pers. comm. 2011). Lastly, both storeowners emphasized the need for a larger consumer base—more people demanding local—and both need more feedback from their customers.

In summary, specialty food stores may struggle the most on the local food front. Producers are wary of selling to specialty food stores because these small businesses buy at wholesale prices, but not in as large quantities as larger operations, such as supermarkets. However, specialty food stores do provide an outlet for farms to move their products (Hamilton pers. comm. 2011). Consumers enjoy these specialty food stores, as they are small local businesses that have established very good reputations for themselves based only the quality of their products; however the typical consumer is not attracted to these markets solely for the markets' commitments to local. The specialty food stores do their best to buy healthy or local foods; yet for both the markets and farms, this partnership is not always cost-effective.

Community Supported Agriculture (CSA)/Direct to Consumer: Kilpatrick Family Farm, Saratoga Apple

Nate Darrow from Saratoga Apple and Michael Kilpatrick from Kilpatrick Family Farms were interviewed as representatives of the CSA/Direct to Consumer category. Both farms have increased significantly in recent years. Founded in 2003, the Kilpatrick Family Farm is a well-established, 1.3 million dollar grossing year round farm. The farm has seen significant growth due to good management and consumer demand. Saratoga Apple is also a well-established, year round farm with many different market venues.

Saratoga Apple specializes in apples and some produce while Kilpatrick focuses on a variety of produce as well as other products.

Both farms' ability to sell in many markets allows them to bring in significant money in sales and also creates marketing opportunities for the farms. Some of their markets include many farmers' markets—Darrow sells at ten during the summer season—their personal stores or CSA programs; restaurants and specialty stores; and Skidmore College. Darrow and Kilpatrick favor farmers' markets—with the Saratoga Farmers' Market being the most profitable—and other direct-to-consumer markets because they get the best value for their products. Both agree that selling wholesale to stores and supermarkets is not very profitable; however the farmers sell to these venues in order to move excess food and market their products.

Kilpatrick Family Farm also runs a successful CSA program, which allows Kilpatrick to have money upfront, which ensures that he has enough money to start the growing season. The farm tries to make the program as convenient as possible for the customer with different options for delivery and pick-up, the ability to choose crop varieties and included recipes. Last year there were 30 people on the waiting list, which allowed Kilpatrick to expand his production—even hiring a CSA manager.

While the farms share many commonalities, both operate slightly differently in practice and theory. On the definition of local, Kilpatrick says the closest origin for a specific product while Darrow defines it as within 100 miles. Kilpatrick defined his typical customer as a 'foodie' and one that recognizes the price is necessary to support local farmers and businesses. Nate Darrow, on the other hand, could not pinpoint a typical customer. Marketing is an area where the two farms differ greatly. Both

Kilpatrick and Darrow believe that smart marketing and business practices are essential to a successful farmer. Kilpatrick has made new and popular technology a priority. He is very diligent with answering emails and updating his websites. The farm has a website, facebook page, email newsletter and blog and Kilpatrick also attends many conferences where he can both learn and network. Darrow, however, is much less proactive in this aspect of his business. He sees the different farmers' markets as his primary means to market as customers are able to talk to farmer or farm workers after purchasing products.

Both farmers noted a list of obstacles to expanding the local food market, and Darrow specifically stated that there is a limit to its expansion—as the Saratoga Springs population cannot be sustained solely on local foods. Both believe that there needs to be more consumer and farmer education. Kilpatrick said that farmers need to be more educated on good business practices. Farmers also need to know how to empower their workers to take initiative. Quality land near a reliable water sources and equipment are also too expensive and Darrow wants to see government programs that aid young, emerging farmers. Darrow was also adamant about a larger problem: globalization and the influx of cheap, international products. Saratoga Apple sees the system as a constant battle between big and small, the big always trying to oust the little guy through legislation and sheer force. Lastly is the problem of wholesale not being a profitable option and farmer's markets being inconvenient for the population at large.

Analysis: Part Two

The Saratoga Springs' Local Food System

In Part One, we presented and analyzed the five distribution markets of the local food system, and in Part Two, we assess the entire local food system, drawing from the perspectives of the producer, consumer, and distribution outlet. To answer our question—is the Saratoga Springs local food system successful and how can it be expanded—it was necessary to gather data from five prominent distribution markets of the local food system as well as to take a comprehensive look at the system in its entirety. There have been many studies that analyze or compare one or two distribution outlets, such as farmers' markets and CSAs, but in order to assess the success of the system, we had to acknowledge that the local food system is more complex than just two distribution outlet types or a foodshed analysis (Peters et al. 2008; Blum-Evitts 2009). Therefore, we researched studies that delved into how the local food system functions, who the consumers are, and identified the barriers facing the system (Jarosz 2008). We used the foodshed analysis as a ceiling to local food expansion and it gave us a comprehensive view of the local food system and a visual to connect farms to Saratoga Springs distribution outlets, to consumers (Figure 1).

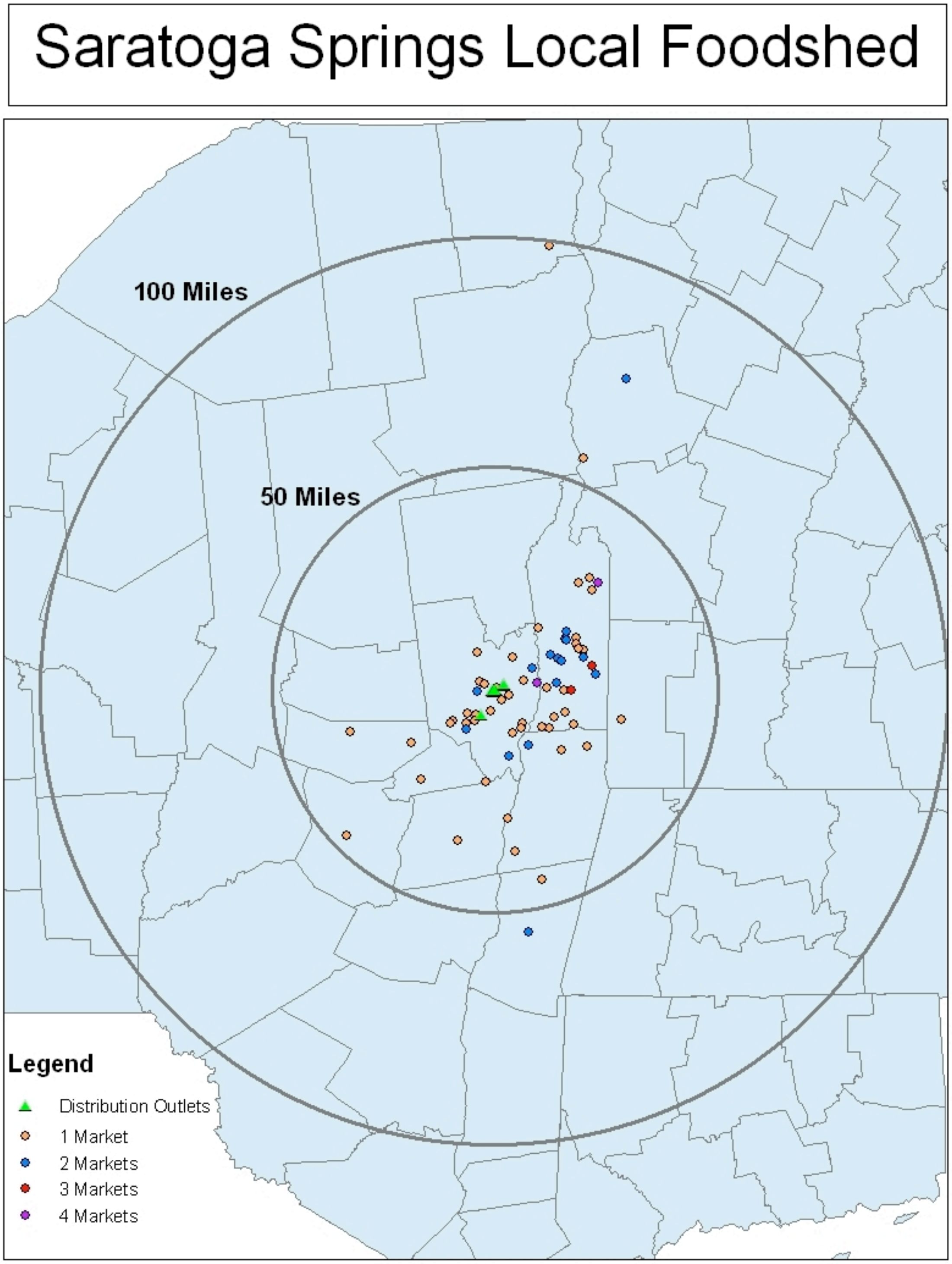

Figure 1: This is our foodshed map of the Saratoga Springs' local food system. The foodshed map shows the locations of the farms that partner with the distribution outlets that we interviewed for this study. The farms shown are the ones that we were able to find complete addresses for that supply Saratoga Springs' distribution outlets with food. Sunset Farm in New Jersey and Anderson Acres in Amsterdam, NY are not displayed on this map. Fifty-mile and 100-mile radii are drawn from Saratoga Springs and the farms are color coded by what types of distribution outlets they sell to.

Example of Market Complexity: Saratoga Apple

Our foodshed map indicates that 63 out of a total of 68 producers providing food to the Saratoga area are within a 50-mile radius and it also shows how many markets each farm sells to (Figure 1). However, in order to understand what these markets actually are and how they operate, we had to look into the foodshed to visualize how the system functions. One microanalysis that exemplifies the complexity of the many markets is Nate Darrow's Saratoga Apple. For years Nate Darrow's market structure has been represented by every connection on our market web.

Today Darrow's most successful market is direct to consumer. Saratoga Apple runs its own farm store and an apple picking business. The farm also participates in an average of ten farmers' markets throughout the summer and its presence at markets continues throughout the winter months. Saratoga Apple has also considered selling to supermarkets and city co-ops run by middlemen; however Darrow found that these venues were not profitable. The farm also sets up a small mini-market every Friday at Skidmore College, in addition to transporting two 40-pound boxes of sliced apples every week to the school dining hall. Saratoga Apple also delivers apple slices and cider every Tuesday to local restaurants and specialty stores. Lastly, all of Saratoga Apple's leftover produce and products are donated to a regional food bank. Not only does the farmer sell to many different distribution outlets, but the distribution outlets themselves each have a different overlapping web of connections between producer, market, and consumer. Thus, there are many pathways for food to travel from producer to consumer (Figure 2).

Figure 2: The relationship between producer, distribution outlet, and consumer are shown. Beginning with the producer, the producer can sell through retail, mainly to farmers' markets who then relay it to consumers; direct marketing, which reaches the consumer with no intermediary' or wholesale, to a variety of institutions that consumers can get the producer's product from. We also found that there is a relationship between the distribution outlets, chiefly that Beekman Street Bistro purchases its food from the farmers' market and that restaurants and specialty food stores both sometimes buy what the producer cannot sell at the farmers' market. Supermarkets are more removed from this relationship and so are closer to the corporate distributor.

Definition of Local

As found in literature and through our interviews with distribution markets, producers and consumers, there is no one definition for local food. The definition is often elusive and ambiguous, and most distribution markets struggled to give us clear boundaries for local. Definitions ranged from within Saratoga and surrounding counties to within the United States. Instead of allowing the ambiguity of this term to impede the growth of local food sales, it is necessary to analyze independent systems in order to get a clear idea of what distance is economically, environmentally and politically feasible for a city or distribution market. With different quantity and variety requirements based on the size of the distribution market, what is considered local for Price Chopper may not be local for Beekman Street Bistro. Although all of the interviewed markets had different conceptions of the term 'local', the most efficient operational definition is—the closest one can get for a given product, or within 100 miles. Ideally however, most of the interviewees believed local meant within Saratoga and surrounding counties.

The Value of Multiple Markets

The food system has many markets and while it can be very convenient to have a one-stop shop to pick up all food items, we found that there is value in the many different markets. The five markets were not easily compared because the pathways that food took to reach the distribution outlet, the dollar value, and the marketing strategies differed. However, we were able to compare these markets on a few key points (Table 3).

Distribution Markets Comparison			
	Percent Local of Total Sales in Summer	**Typical Customer**	**Farm Size**
Supermarkets	~20-30%	Everyone	Larger, established farms
Farmers' Markets	100%	Values food and knowing where food comes from	Small to large farms
Restaurants	~90%	Adults, people who like to dine	Medium to large farms
Specialty Food Stores	~10%	People from Saratoga Springs who value quality food	Medium to large farms
Direct to Consumer	100%	People that value food	Small to large farms

Table 3: This table compares the distribution outlet categories on key points. Farmers' markets and direct to consumer have the highest percentage of local food sales, and farmers' markets, specialty food stores, and direct to consumer have the smallest definition of local. Supermarkets have the widest range of customers and require larger and established farms, while the other distribution outlets are able to partner with small to medium farms that are not always as established. For our purposes, a small farm is 0-10 acres, a medium farm is 10-100 acres, and a large farm is greater than 100 acres.

One trend that we observed was that certain size farms partnered with certain distribution outlets. For the most part, small farms were only able to break into the farmers' market and direct to consumer markets. The supermarkets partnered with established and large farms to meet their volume and consistency needs (Stauffer pers.

comm. 2011) while the farmers' markets and direct to consumer markets were the most accommodating to farms of all sizes. This leaves little room for small or new farms to break into these markets. Farms also face the challenge of adhering to the requirements of other markets, such as restaurants and specialty food stores—which demand consistent delivery, yet struggle to pay the price of more expensive local food. According to the 2007 Census of Agriculture, the number of small farms in New York is increasing which could be a product of the interest and growth in local foods or reflective of a potential growth in farmers' markets and direct marketing. While this could be a good sign, the competitive market makes it hard for new farms to find sales venues.

Profitability of Each Market

While it is difficult to compare local food's profitability between different categories of distribution markets as dollar value and volume sold is very different, there are some important trends. Farmers' markets are often funded by vendor fees, or help from an outside business organization. As demonstrated by the winter weekend rapid market assessment at the Saratoga Farmers' Market, over 500 customers purchase food at one market and many spend over $30. Farmers also receive the best profit margin selling direct to the consumer; therefore farmers also benefit highly from community supported agriculture (CSA) programs. Nate Darrow of Saratoga Apple receives 40 cents for a pound of apples sold wholesale at supermarkets, compared to $1.50 sold retail at the farmers' market or on his own farm. Depending on the size of the production, farms like Kilpatrick Family Farm can run programs with 100 customers, charging $600 for a share during the full growing season—which ensures a reliable source of income at the beginning of the growing season. This income allows farmers to make infrastructure improvements, invest in equipment or expand their operation.

Specialty food stores and restaurants often have to cut corners in order to purchase locally produced food. Tim Meaney of Beekman Street Bistro says that he does not advertise enough because he is already spending so much money on local foods. David Pedinotti of One Caroline Street Bistro and Mouzon House also said that the high price of local means he sometimes has to pinch pennies. For Pedinotti, local meats cost around $12 per pound, whereas factory farm produced meat costs only $3.69 per pound. This difference in price means that distribution market owners and managers have to be truly invested in local foods. Putnam Market, a specialty food store, also raised concerns about the profitability of local. Unlike restaurants, the store is unable to charge more for sandwiches with local ingredients, because while the deli usually attracts wealthier consumers, the price of a sandwich cannot be raised much higher than $10. Also, Cathy Hamilton, the owner, claims that because the market requires a constant large supply of tomatoes, lettuce and other greens for sandwiches, buying local does not always make financial sense. Lastly, supermarkets get a lower profit on individual items when buying local. Megan Collins from Price Chopper said that the store sells 'non-local' corn for 79 cents per pound compared to two for a dollar for local corn.

The high price of local is often a deterrent for consumers. With more local food appearing in supermarkets at reasonable prices, more consumers are able to purchase these items; however this venue is not as profitable for farmers. It is no coincidence that Beekman Street Bistro, Mouzon House and even the Saratoga Farmers' Market, largely attract a more educated, wealthier population. During the rapid market assessment at the

Saratoga Market, many customers stated that they would enjoy lower food costs, yet most understood the necessity of such high prices.

Farmers' Market as the Center of the Local Food System

Farmers' markets emerge as the center of the local food system and as one of the best outlets of local foods. As previously noted, restaurants rely on farmers' markets for local sourcing, and Rick Stauffer, produce manager at Hannaford, believes that "the farmers' market is not competition, [but rather] a business prospect" (Stauffer. pers. comm. 2011). Hannaford and Price Chopper can visit the farmers' markets to establish more relationships with farms. Although farmers' markets may not sell the largest volume of food, these markets sell all local food. Additionally, producers can directly market their product to consumers, which allows them to get the greatest return for their product. Farmers' markets also create a sense of community and source a variety of products. While there is consumer demand and a steady waitlist of perspective vendors, larger farmers' markets can be difficult to expand because of competition and space issues. Therefore, it is more beneficial to establish more farmers' markets in more locations. This improves convenience for the consumer and also increases the number of marketing possibilities for the producers.

Supermarkets have the Most Potential to Grow

While farmers' markets appear to function most successfully for the farmer and for the local food system on a whole, supermarkets have the greatest potential to expand their local sourcing. Managers and employees that are committed to local foods have been and will be instrumental in growing supermarkets' involvement with local. Hannaford's manager, Rick Stauffer, is very passionate about local, fresh food and he is adamant about his openness to any new opportunity (Stauffer pers. comm. 2011).

Because the majority of consumers get their food primarily from supermarkets, it is possible that supermarkets sell a greater volume of local products to a wider audience then the other local food distribution markets. For example, local food makes up approximately 20% of Hannaford's produce sales in the summer and considering that they sell about $12,000 in produce daily, a rough calculation indicates that Hannaford's daily local foods sales are approximately $2,400. The Saratoga Farmers' Market on the other hand, sells all local, but it only takes place twice a week in the summer, averaging about $1,800 in credit card sales per market. Even if this number is doubled to account for cash payments, that amounts to almost $8,000 per week compared to $16,800 per week of local sales at Hannaford. Clearly, supermarkets, particularly Hannaford, can have a lot of power in the local food market.

To further support the magnitude of supermarkets, we conducted an online survey of the Saratoga Farmers' Market consumers (see Appendix 5 for complete results). We found that people get their food mainly from supermarkets, followed by the Saratoga Farmers' Market, then specialty food stores, directly from farmers, and finally restaurants. This shows that people frequent supermarkets the most out of these five distribution outlet categories (Figure 4).

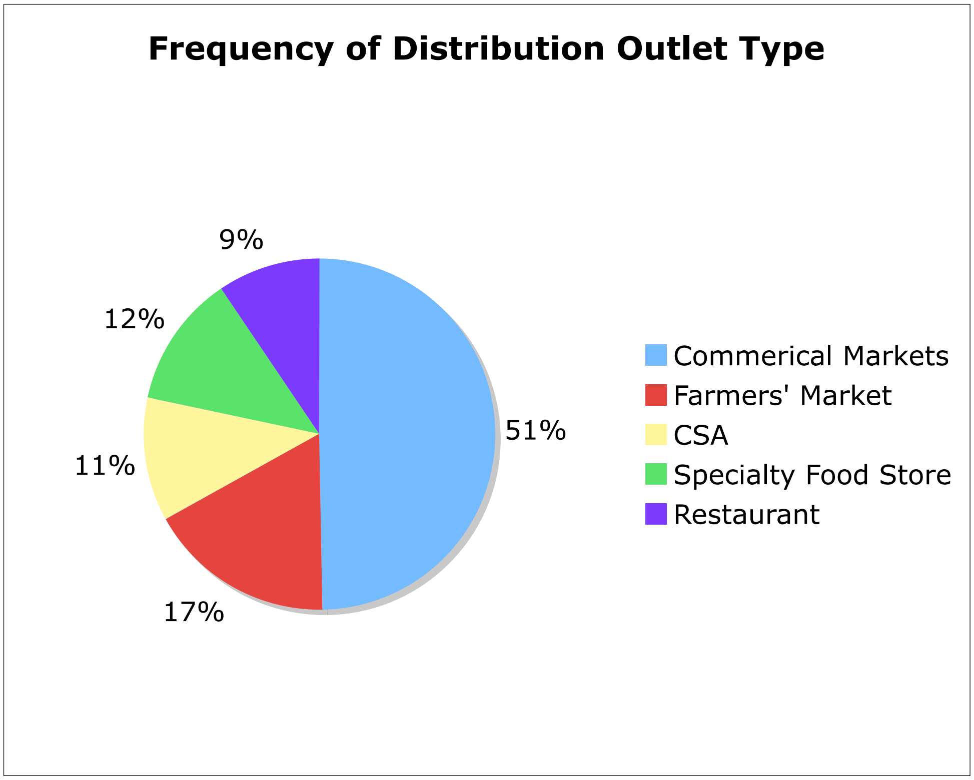

Figure 4: This chart divided the food sources from Figure 4 into the five distribution categories that were created for this project, supermarkets (or commercial markets), farmers' markets, CSA, specialty food stores, and restaurants. Consumers frequent commercial markets 51% of the time. The commercial markets are Price Chopper, Hannaford, Stewart's, and Wal-Mart.

Marketing

Throughout our study marketing has proven to be one of the most effective tools to expanding the local food system. Each market has its own approach to marketing; however it is apparent that every area of the local system needs to improve in this respect. By exposing consumers to local food at multiple venues, it will raise consumer awareness and they may begin to view local as an important criterion in their purchases.

Marketing schemes are variable among all of the distribution outlets, particularly between the two supermarkets. Price Chopper adheres to mandatory labeling laws and during the summer months there are large signs at the front of the store showcasing farm partner names. There are also flyers and although we saw no notice of this, Megan

Collins said that there are individual descriptors of producer food origin on the stands (Collins pers. comm. 2011). Hannaford runs an umbrella Close to Home program, which applies to all stores. The Saratoga supermarket had clear signs over produce, denoting its origins. Yet, farm names were often missing, and a picture of New York State usually indicated local. The Hannaford store also features farmers' stands in the summer and there is a bi-annual magazine publication, which features a local farmer and their products.

We see this with the new COOL regulations, which require supermarkets to label the country of origin on all fresh produce. Price Chopper employee, Collins, noted that she has seen an increase in customers demanding local products and this labeling has also increased customer wariness about international produce (Collins pers. comm. 2011). Stricter labeling requirements, such as state of origin production, would be even more beneficial for local as this will begin to lay the groundwork for accountability. Setting the example, supermarket labeling could spread to other market venues. It is possible that local could be the next organic, therefore it is important that the local food movement learn from both the successes and failures of organic labeling.

Currently many restaurants market their local food by including farm names on menus. This marketing is both good for the business and for the featured farmer, and it also instigates questions from customers. External marketing of their local foods could be greatly improved, but in order to do so, restaurants must grapple with the high costs of local food. Specialty food stores, on the other hand, struggle with marketing. Our study found that specialty stores' commitments to local were significantly lower than other venues because of high local prices and the small size of their operations. At Putnam

Market and Four Seasons Market, both internal and external marketing could be improved.

Both the Saratoga Farmers' Market and Ballston Spa Farmers' Market employ successful marketing techniques; however their methods are very different. The Saratoga Market hires a market manager who is in charge of writing newsletters, updating the facebook page and website and creating posters and advertisements for local radio stations and area webpages. The Ballston Spa Market also has a market manager, but the local Business and Professional Association is responsible for all of the external marketing. This group includes the Ballston Spa Farmers' Market at all events and the group sponsors billboards, radio announcements and features the market on their webpage.

Lastly, both Darrow and Kilpatrick believe that marketing is a huge obstacle for farmers. Many farmers do not have the time, money or the knowledge to effectively market their farms and products. While Kilpatrick devotes hours of his day towards outreach and marketing, Kilpatrick acknowledges that he needs to do more. While Darrow, like many farmers does not emphasize newer outreach and marketing techniques. Darrow instead finds handing out flyers with directions to his farm on it very effective.

While marketing for local foods seems to have improved in recent years, continuing to enhance marketing will help to boost the local food market. To improve marketing, it is important to understand the reasons why people buy local food and to build upon more successful marketing strategies, such as restaurants' technique of including farm names on their menu. The primary reasons people shop at the Saratoga

Market are for the quality and taste of the food, to support the local economy and farmer, and because consumers value transparency, and these reasons can be the foundation for future marketing (Figure 5).

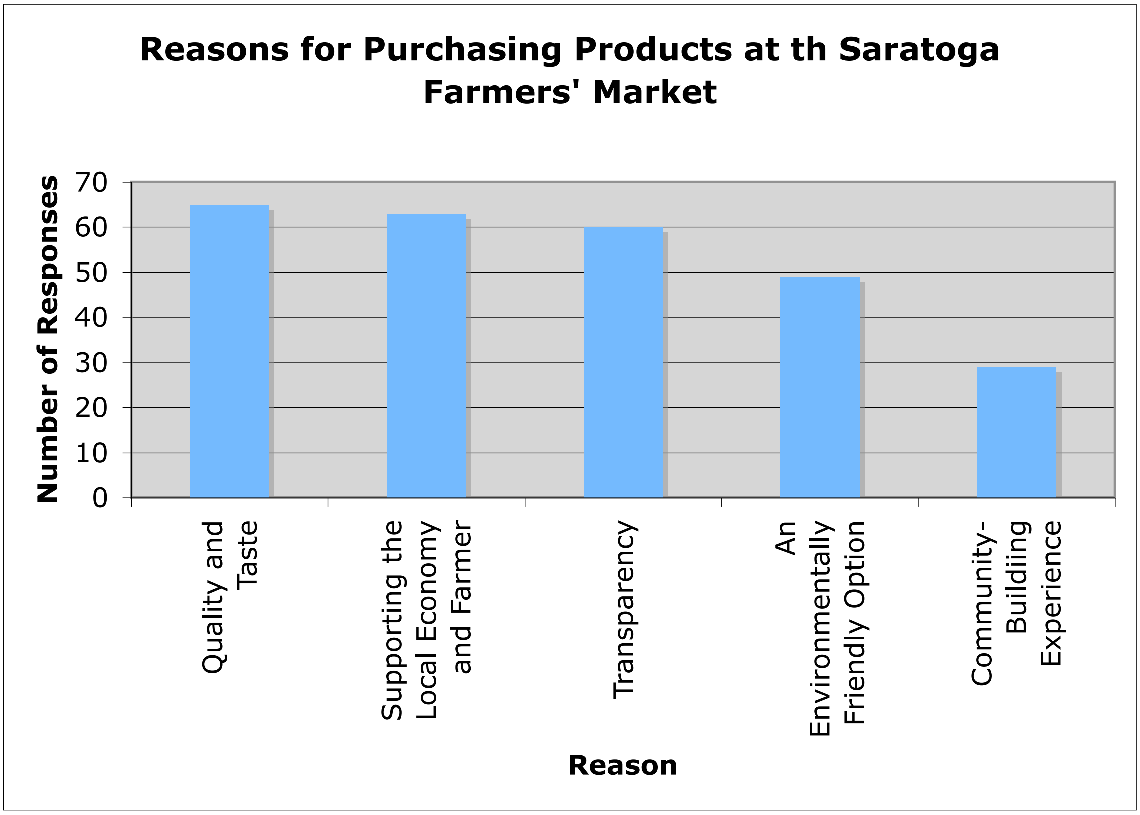

Figure 5: The online survey of local food consumers showed that quality and taste was the most important reason for purchasing products at the market. Supporting the local economy and farmer and transparency, or knowing where your food comes from were also important pull factors for the Farmers' Market. For these questions, the participants were asked to rank their reasons for purchasing products at the Saratoga Farmers' Market on a scale from 1 to 5 (5 being the highest). The results above show only the participants' number 5 answers.

Obstacles

Each distribution outlet faces a host of challenges to selling more local food, ranging from the struggle against the status quo problems with farm infrastructure, which interferes with the quality and quantity of product produced, and the potential perishability of the product. Clearly, there are some political and structural obstacles limiting the success and size of the local food system, such as government subsidies, but our major focus is on what Saratoga Springs can do to expand its local food system. The four major obstacles of the Saratoga Springs local food system are 1) seasonality, 2) price, 3) farmer education on business, and 4) marketing strategies.

Located in the northeast, seasonality can be the factor that breaks a distribution outlet's commitment to local foods. Because local foods are more expensive, are more perishable without pesticide use, and can have problems with consistency, quantity, and quality, some distribution outlets have found it difficult to invest in local foods because the off-season can be detrimental for produce sales. The distribution outlets we interviewed in Saratoga Springs, which had the biggest issues with these factors are supermarkets and specialty food stores because they consistently require a great quantity of quality product; however all of the markets noted some problems.

Farmer education is also a significant problem for the local market. Through our interviews we have found that farmers do not know how to break into some markets or how to most efficiently sell their product. According to Kilpatrick, most farmers want to farm, not run a business. In today's economy, farmers cannot solely concentrate on farming. They need the infrastructure and equipment along with a knowledge of the global economy, political environment, and biologic consequences—such as soil degradation—of their farming strategies and practices.

This leads to the fourth obstacle, and both Michael Kilpatrick and Nate Darrow affirmed that production is given, but marketing is the hardest part. Farming is a business, yet many farmers do not have the time or skill to keep themselves informed, educated, and updated which would allow them to employ newer technologies to reach distribution outlets and consumers. A lack in marketing or business strategy considerably hinders their ability to sell their product. To solve this problem, it requires independent effort by the farmer and a more supportive federal and state government. Additionally, the exhausting and time-consuming occupation of farming makes it hard for farmers to find the time or the money to educate themselves.

Recommendations for Expansion

1) Expand Market Pathways

It is clear that there are many pathways for food to travel from farm to consumer and that this multiplicity of pathways is beneficial for the farmer, consumer and distribution outlet. Farmers benefit from increased venues for marketing and sales; consumers enjoy increases in choice, awareness, and convenience; and distribution outlets are able to form profitable partnerships with more markets and farmers.

We have identified the Saratoga Apple "mini-market" at Skidmore College as a model, which can be replicated and implemented at large institutions, such as Saratoga Hospital, Saratoga High School and State Farm. This model would get more players involved while creating more profitable direct to consumer markets for farmers. Expanding this model would also widen the consumer base, as Michele Berdela, a Skidmore student said: "if it's there people will take advantage of it [but] if it's not there, people won't go out of their way to go to a farmers' market because of time constraints". (Berdela pers. comm. 2011).

2) Improve Marketing and Labeling of Local Foods

Across the board marketing and labeling was found to be an important factor to expanding inclusion within the local market. Consumers need to be able to identify what is local so that local can become a criterion for purchasing choices. Consumers want transparency and therefore Hannaford's Close to Home program and Beekman Street

Bistro's menu labeling, must be expanded upon. One way to do this is to include farm specific information about local products; then consumers will better understand where their food is coming from and to make more informed decisions. Supermarkets, as well as other markets can place farm visuals, farm descriptions or geographic maps, which could indicate the location of the farm in relation to the market next to individual products.

3) Capitalize on Available Resources

As an immediate step to expand the local food system, local farms and distribution outlets must use all resources available to them. As evidenced by an interview with the Saratoga Farmers' Market manager, Skidmore and its students are an important resource. Students can be used in for credit internships to give farms and markets a better understanding of their consumer base, better ways to market and label local foods, and insight into forming strong partnerships with other markets and farms.

Conclusion

By dissecting and analyzing the local food system, we wanted to take the food issue beyond theory and visually connect the dots: farmer, distribution outlet, and consumer of the Saratoga Springs' foodshed. Our research has revealed certain assets needed to be a successful local food distribution market (Table 4).

Assets for a Successful Local Food System		
Producer	*Distribution Outlet*	*Consumer*
Farming Skill Set	Clear Marketing Strategy	Informed or Educated
Farmland	Commitment to Local Food	Access to local food markets
Networking skills	Willingness to devote more time and money	Financially stable/Willing to spend on local food
Marketing Strategy and Business Skill Set		

Table 4: The project has shown certain assets of the producer, distribution outlet, and consumer that translate into a successful retail value chain for the local food market. There are different assets for success depending on the stage in the retain chain.

While our study has provided a broad view of the local food system, there is still more that can be done in assessing the volume, economic exchange, business strategy, and politics of food.

The Saratoga Springs local food system is a small, but growing sector of the food system. The majority of the current local foodshed is within 50 miles of Saratoga Springs and we found that in this foodshed, local food consumers are usually older, educated, and willing to spend more money on food. Local foods are penetrating more areas of the market and thus reaching a greater diversity of customers in light of global concerns about food safety and security; however, there are still hindrances to expansion, such as a slow economy and competition from big corporations. Additional obstacles include seasonality, price, farmer education, and marketing strategies. Despite this, the local food system has potential to grow. Eventually, with more established and successful farms, local foods will have the infrastructure needed to provide to more markets in a greater capacity. By laying the foundation of the Saratoga Springs local food system, we have paved the way for future studies to expand on our research.

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Appendix 1

Interview Questions

1. What is your definition of local food?
2. Why do you buy local food? Is there a benefit to buying and selling local foods?
3. Where do you buy local food from? What are your connections with the farmers like?
4. Who is your typical customer?
5. Why do you think consumers buy local food?
6. Do you market your local connection?
7. What are the challenges/obstacles to selling more local food?
8. How much money do you spend on local food in a year? How has this changed over the last 10 years?
9. In your opinion, what is the best way to expand the local food market? How can the local food system be improved? Is it a matter of marketing/education/awareness/branding…?

Appendix 2

Rapid Market Assessment Questions

1. How much have you spent at the market today?
2. Where do you live?
3. What are your other local food sources?
4. To increase your interest, the market should offer more… [produce, dairy, meat/poultry, prepared food, other]
5. What suggestions do you have for the market?

Appendix 3

Consumer Survey Questions

1. Rank your reasons for purchasing products at the Saratoga Farmers' Market (1-lowest, 5-highest).
2. Please rank how often you use these sources to supply your food (this includes both local and non-local food). (1 being the least applicable, 8 being the most applicable)
3. What is your definition of local?

4. Do you choose your food sources based on whether or not they use local food (local defined as within a 100 mile radius)?
5. What is the highest level of education you have completed?
6. How often do you frequent the Saratoga Winter Farmers' Market?
7. Who do your market purchases provide for?
8. What is your age range?

Appendix 4

Distribution Outlets and Their Farm Partners

Supermarkets

Price Chopper Farm Partners
Rulf's Orchard

Hannaford Farm Partners
B.J. Farms
Webb's Family Farm
Goold's Orchard
Champlain Orchards
Saratoga Garlic
Hick's Orchard
Sheldon Farm
Underwood's Shushan Valley Hydro Farm

Farmers' Markets

Ballston Spa Farmers' Market Vendors
Anderson Acres
Smith's Orchard & Bake Shop
Bulldog Farms Greenhouse & Plants
Willow Marsh Farm
Ropitsky Family Farm
Rutkowski Farm
Kaydeross Farms
MacDougall Farm
My Other Garden
Pleasant Valley Farm
Morning View Farms
Paper Dragon Farm

Conbeer's Farm

Saratoga Farmers' Market Vendors
Battenkill Valley Creamery, LLC
Clark Dahlia Gardens & Greenhouses
Argyle Cheese Factory LLC
Ballston Lake Apiaries
Brookside Farm
Burger Farm (First Star Farm)
Butternut Ridge Farm
Dancing Ewe Farm
Denison Farm
Downing Farm
Dyer’s Farm & Greenhouse
Elihu Farms
Gifford Farms
Hayner’s Farm
K&D Farm
Kilpatrick Family Farm
Lewis Waite Farm
M&A Farm
Malta Ridge Orchard and Gardens
New Minglewood Farm
Oligny’s Country Gardens
Otrembiak Farm
Pleasant Valley Farm
R & R Farms
Reid Weatherby Farm
Richmonds Greenhouse
Row to Hoe Farm
Saratoga Apple
Scotch Ridge Berry Farm
Sheldon Farm
Stannard Farm
Stevens Vegetable Farm
Sweet Spring Farm
Underwood’s Shushan Valley Hydro Farm
Wing Road Farm
Zehr & Sons Mushroom Farm

Restaurants

Beekman Street Bistro Farm Partners
Butternut Ridge Farm
Denison Farm
Hayner's Farm
Kilpatrick Family Farm
New Minglewood Farm
Wiltbank Farm
Little Field Farm
Meadowbrook Dairy Farm
Wanabea Farm
Stannard Farm

Mouzon House/ One Caroline Street Bistro Farm Partners
Kilpatrick Family Farm
Lewis Waite Farm
New Minglewood Farm
Pleasant Valley Farm
Saratoga Apple
Sheldon Farm
Sweet Spring Farm
Sap Bush Hollow Farm
Slack Hollow Farm
Wiltbank Farm
Little Field Farm
Misty Knolls Farm
Meadowbrook Dairy Farm
The Alleged Farm
Denison Farm

Specialty Food Stores

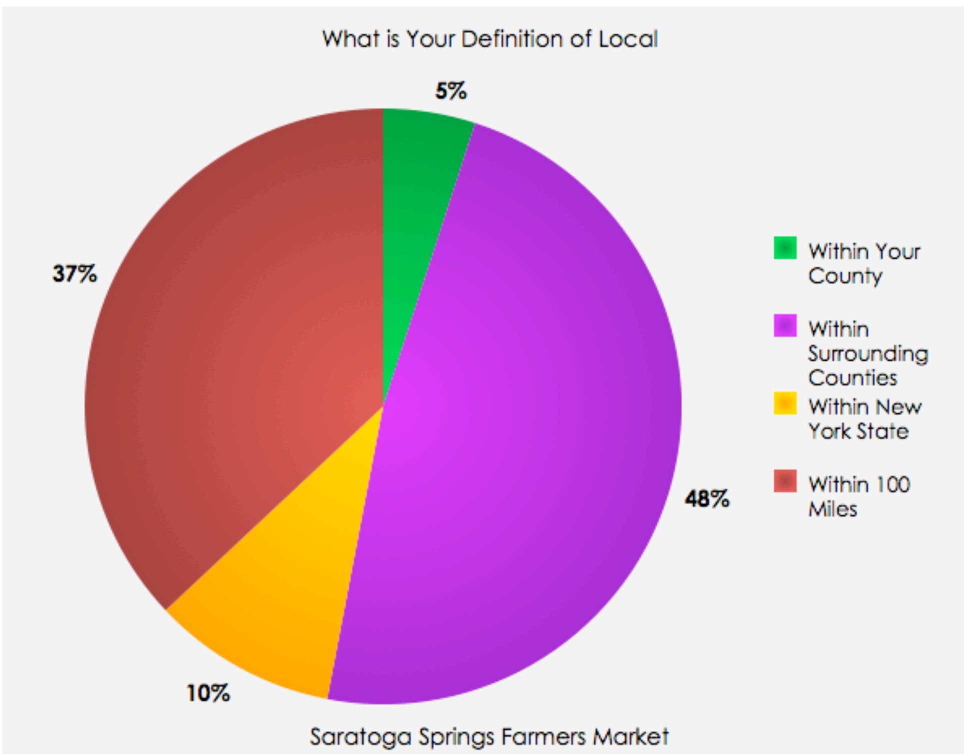
Putnam Farm Partners *Partial List
Thomas Poultry Farm
Battenkill Valley Creamery, LLC
Old Chatham Sheepherding Company
Gardenworks Farm
Clark Dahlia Gardens & Greenhouses

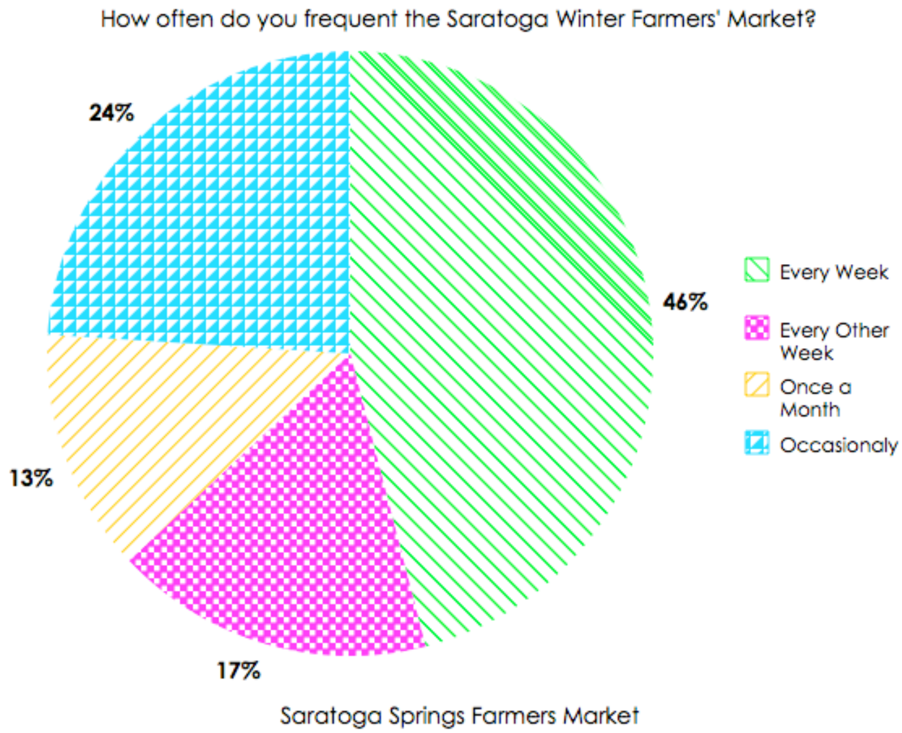
Four Seasons Farm Partners

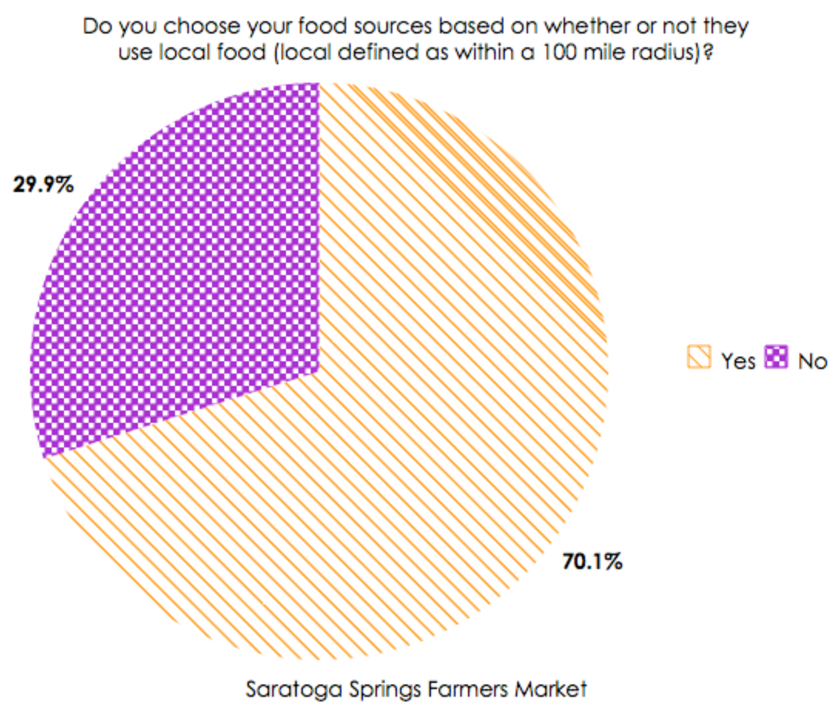
Mole Patch Farm
Crandell's Corners
Ken Denberg
Joint Venture Farm
Polymeadows Farm
Burch Family Farm
Mapleland Farms
Kilpatrick Family Farm
Lewis Waite Farm
Otrembiak Farm
Zehr & Sons Mushroom Farm
Mack Brook Farm

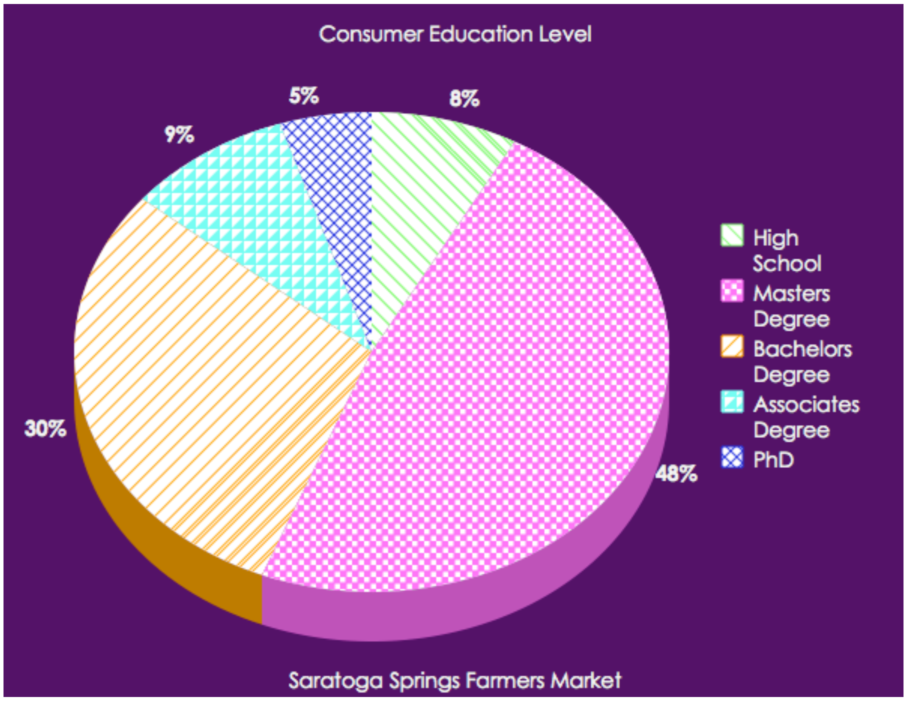
Appendix 5

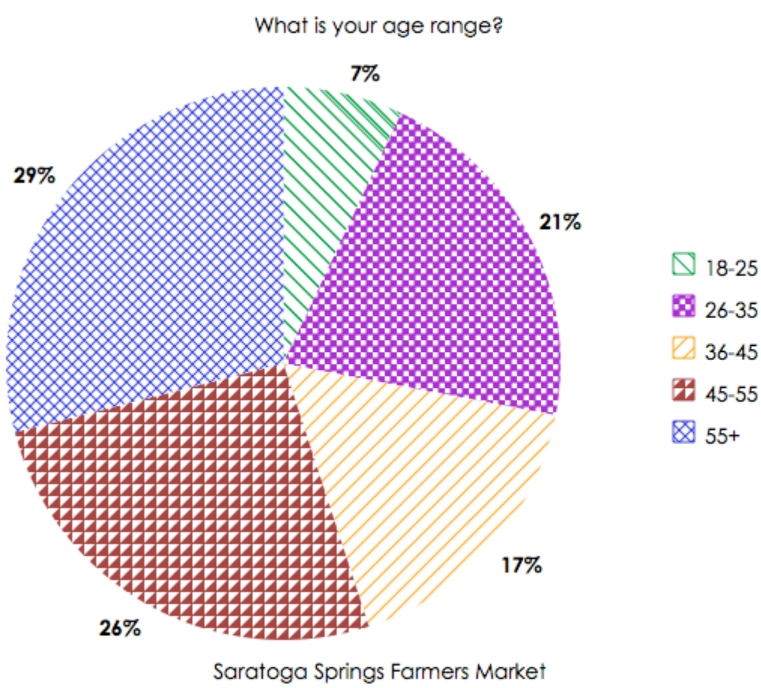
Consumer Survey Results

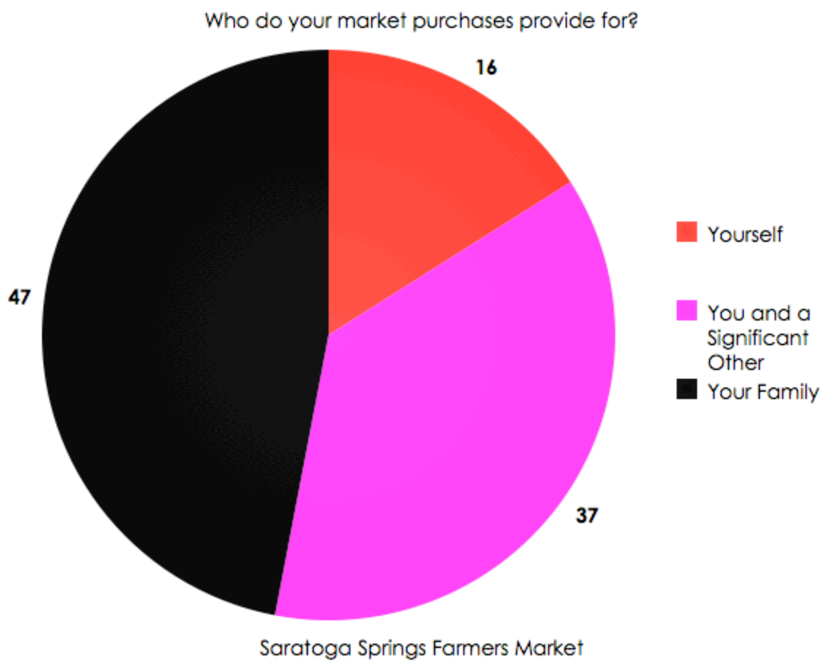



How often do you frequent the Saratoga Winter Farmers' Market?
24%
46%
13%
17%
Every Week
Every Other Week
Once a Month
Occasionaly
Saratoga Springs Farmers Market


Do you choose your food sources based on whether or not they use local food (local defined as within a 100 mile radius)?
29.9%
70.1%
Yes
No
Saratoga Springs Farmers Market


Consumer Education Level
5%
8%
9%
30%
48%
High School
Masters Degree
Bachelors Degree
Associates Degree
PhD
Saratoga Springs Farmers Market


What is your age range?
7%
29%
21%
17%
26%
18-25
26-35
36-45
45-55
55+
Saratoga Springs Farmers Market


Who do your market purchases provide for?
16
47
37
Yourself
You and a Significant Other
Your Family
Saratoga Springs Farmers Market