Local Food Study of Northern Berkshire County

A Study for the Berkshire Regional Planning Commission

December 2011

Figure 1: A variety of local produce on display at Whitney's Farm Stand in Cheshire, MA.

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Introduction

We worked with our client, Amy Kacala, Senior Planner at the Berkshire Regional Planning Commission (BRPC) to aid in the development of a regional sustainability plan for Berkshire County. A critical part of the sustainability plan as defined by the BRPC is farming and locals foods. The BRPC has partnered with the Glynwood Center, a non-profit farming organization based in Cold Spring, NY, that provides assistance to communities through its Keep Farming® program, to aid in the development of this sustainability plan for Berkshire County. As part of the effort to develop his plan, we worked with a group of volunteers from Northern Berkshire County and conducted surveys of residents and retail managers on their local food attitudes and consumption habits.

The Project in Context

The Keep Farming® program helps planners define goals for the promotion of local farming and provides technical assistance for volunteers in information gathering, assessing, and planning for the development of a more sustainable local food system. The process consists of four stages: inventory, strategizing, development of an action plan, and implementation. To facilitate the process, Berkshire County was divided into five different subregions or "working groups" consisting entirely of volunteers from each subregion. Our project group worked within the Northern Berkshire working group on the first part of the process: inventory. The goal of inventory is to understand the current food system of Northern Berkshire County. Andrea Burns of the Glynwood center listed the following as questions to be answered during the inventory process:

1. What do residents eat?

2. Where do they buy food?
3. Where does the food come from?
4. How does food move from farm to table?
5. How does food production fit into the community fabric?
6. What are some current needs of farmers and consumers

(Andrea Burns, Presentation at Keep Farming® Kickoff event, 10/24/11).

Four teams were created to address different aspects of the inventory process: 1) the Local Foods team focusing on food supply and demand; 2) the Urban and Natural Habitat team; 3) the Farm Economics team; and 4) the Health and Nutrition team. Each team gathers information about its particular subject area, and at the end of the inventory process the teams will pool information to develop a broad picture of the food system in Northern Berkshire County and identify where there is room for improvement. Our project group lead the Local Foods team for the duration of the fall semester.

The Local Foods team was tasked with assessing "supply" (where food is sold, what is being sold and how much is local, what options exist to increase sales of local foods in existing venues) and "demand" (what consumers are buying, whether there is active support for local food, if there are local food demands going unmet by local supply chains) (Amy Kacala, Presentation at Keep Farming® Kickoff event, 10/24/11). We addressed these questions through consumer surveys and retailer interviews, which we administered at food distribution centers (e.g. supermarkets) across the county.

Project Background

Foodshed Analysis

In the 2010 edition of the ENVI 302 Environmental Planning Workshop, students Vashti Emigh, Anthony Raduazo, and Kathleen Durante conducted a foodshed analysis of Berkshire County for the Berkshire County Regional Planning Commission. One goal of this study was to look at whether the foodshed had the capability of fulfilling the region's food needs. Analysis of GIS maps and census data showed that there was a significant amount of non-woodland prime farmland that was not in agricultural use in Berkshire County. As shown in Table 1, a small proportion of total land in Berkshire County (6.49%) was used for agriculture in 2005, while the most common land use category is "natural land," which includes the prime farmland not in use.

Table 1: A chart listing the various uses of land in Berkshire County and their respective amounts, from Berkshire County Foodshed Analysis.

Land Use	Acreage	Percent
TOTAL NATURAL LAND	**508647.84**	**83.99**
TOTAL OPEN LAND	**8353.73**	**1.38**
TOTAL AGRICULTURAL LAND	**39231.71**	**6.49**
TOTAL RECREATIONAL LAND	**4132.48**	**0.66**
TOTAL RESIDENTIAL LAND	**32305.01**	**5.34**
TOTAL INDUSTRIAL LAND	**12984.72**	**2.14**
TOTAL LAND	**605655.49**	**100**

The conclusion of the report, as shown in Table 2, was that by using all of its potential prime farmland, Berkshire county could feed itself if its residents had vegan, vegetarian or light meat diets.

Table 2: Agricultural land needed to support various diets as a proportion of the total available agricutural land, from Berkshire County Foodshed Analysis.

Farmland Needed for Different Diets			
	Acres	**Percent of Total Land**	**Percent of Potential Land**
Total Land Area	593,093	100	
Total Potential Farmland Available	83,610.8	14.1	
Vegetarian Diet (.5 acre/person)	64,644	10.9	77.32
Light Meat Diet (.6 acre/person)	77,572.8	13.08	92.78
Heavy Meat Diet (2 acre/person)	258,576	43.6	309.26
Vegan Diet/Soil Sustenance (4,000sq ft/person)	11,872.18	2	14.2

Thus, Berkshire County has the potential to feed itself, which is an important assumption that led Amy Kacala to include local food and farming as a component of the sustainability plan. Agricultural land currently in use in the northern Berkshire region appears concentrated in Cheshire, Adams, and Williamstown, as can be seen in Figure 1, and the foodshed analysis suggests that this could expand and grow local supply.

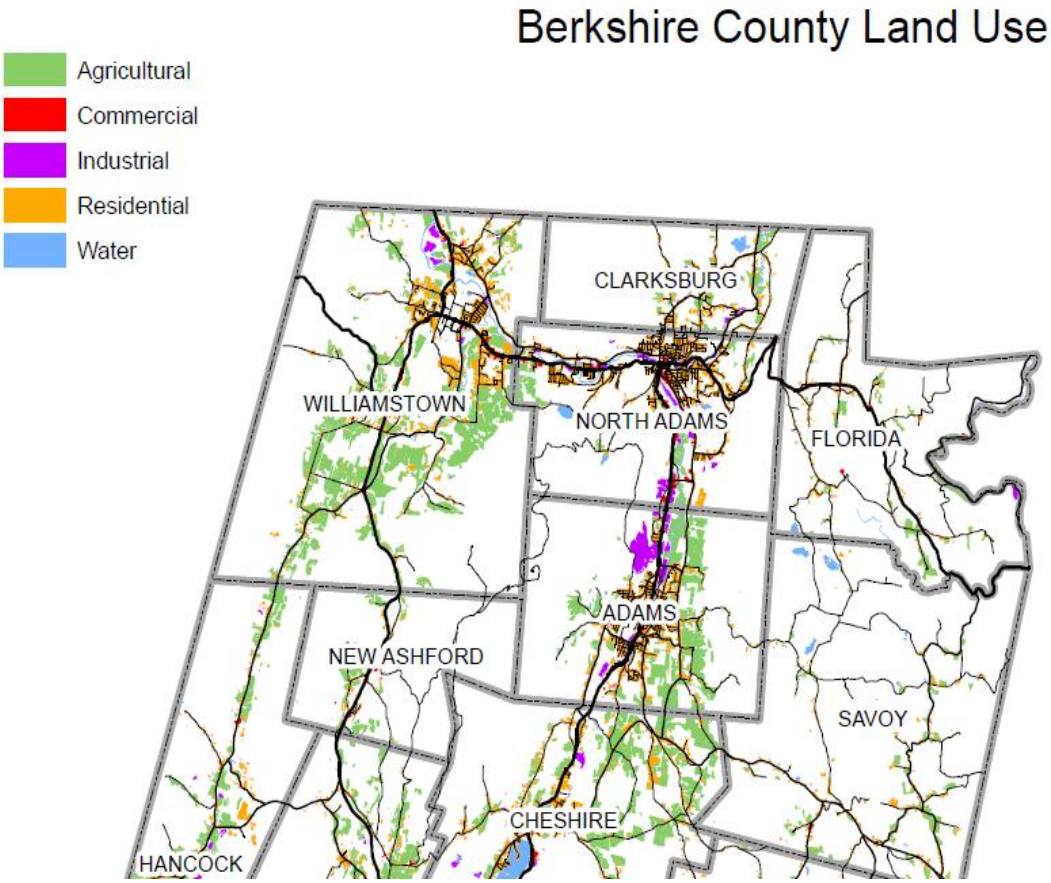


Figure 2: GIS map layer depicting the various uses of land in Berkshire County, courtesy of Mark Maloy of the Berkshire Regional Planning Commission.

The foodshed group also sought to estimate food demand and expenditures in the county. They cited a report by the Bureau of Labor Statistics that found the 2007 national average annual expenditure to be $49,638 per customer unit, with 12.4% of that attributed to food purchases, which equates to $6,133. In the Northeast, 44% of this food expenditure is on meals outside the home and 56% credited to food for meals at home. Expenditures on meals at home were broken down as seen in the following graph (Figure 2) from the report:

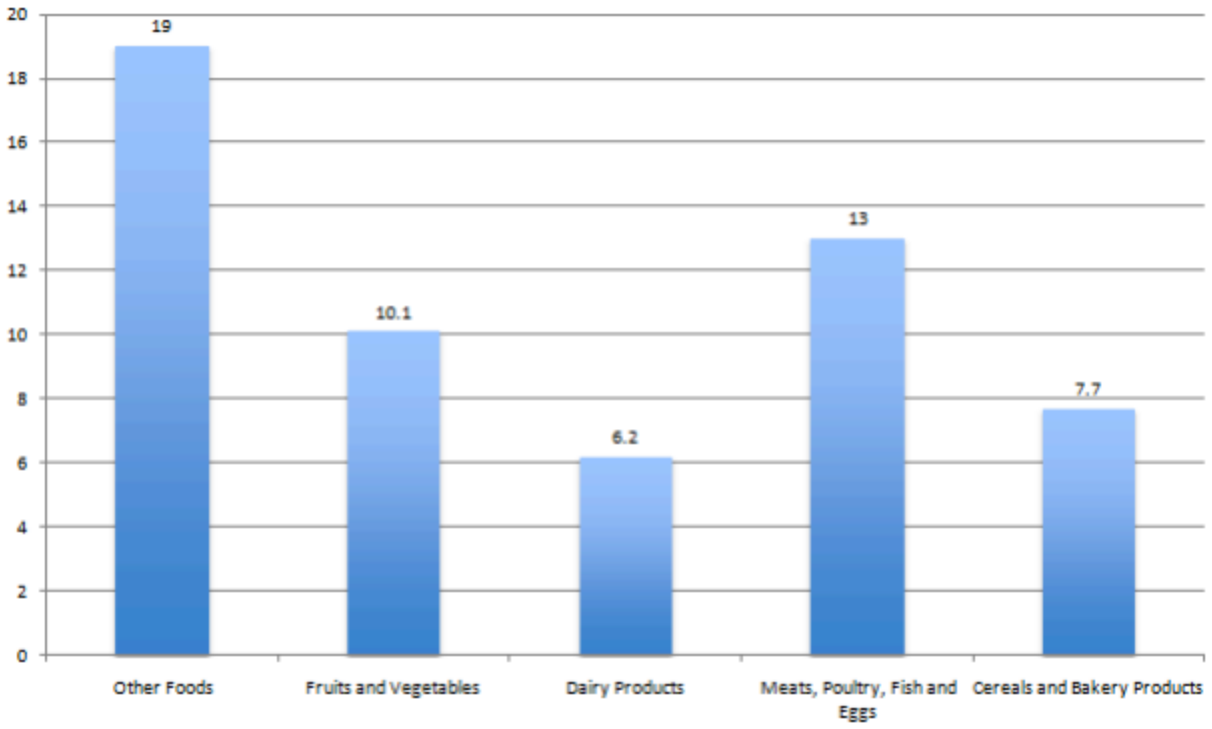


Figure 2: Graph from <u>Berkshire County Foodshed Analysis</u> depicting the expenditure breakdown, in percentage, on food for meals at home. The percentages add up to 56, which is the percentage of money spent on food for meals at home in relation to food both purchased for meals at home and outside the home. The "Other Foods" category means "fats, oils, sweets, sodas, and other miscellaneous foods, typically high-fat or high-sugar snack foods" (20).

This quantitative data is an important piece of understanding local food demand in Northern Berkshire County. Building off the estimates of the foodshed group, our group attempted to create a more qualitative picture of local food demand.

Site Description and Demographics

The following is a chart (Table 2) of population demographics of the eight towns in northern Berkshire County, as well as for Berkshire County as a whole and for the state of Massachusetts.

Table 3: A chart listing the population, population density, and median household income for the eight municipalities of northern Berkshire County, as well as for Berkshire County as a whole and for the state of Massachusetts. Information from city-data.com

Municipality	Population	Population Density (2009)	Median Household Income (2009)
Adams	5,587	2,468	29,896
Williamstown	4,592	1,342	39,628
New Ashford	248	18	55,507
Savoy	707	20	44,922
Florida	675	28	46,571
Clarksburg	1,615	127	46,963
North Adams	13,816	676	29,675
Cheshire	3,304	123	45,468
Berkshire County	129,288	139	42,290
Massachusetts	6,593,587	810	64,081

The populations of these eight municipalities in northern Berkshire County are relatively low, as are their population densities. This implies that the populations are relatively spread out. Therefore, sources of food, farms, and other resources are also spread out. This underlies the importance in this particular area of centralized food distribution centers such as supermarkets and retail/wholesale stores. An alternative conclusion that can be drawn from the low population density is the potential for personal gardens. There is more unoccupied space, and so people can use that space to grow their own foods. The low median household income, at least relative to the rest of the county and state, might imply that many of the residents of northern Berkshire County are dependent on these supermarkets and retail/wholesale stores for food. Furthermore,

they may be less inclined to purchase local food since it is, on average, more expensive than conventional food.

Berkshire Farming History

Agriculture was and still is a major part of the economy in Berkshire County. Historically, agriculture has been the dominant form of production in most of Berkshire County. In Northern Berkshire County, small farms dominated the landscape and the economy up until the completion of the Hoosac Tunnel in 1875, which brought about economic diversification and significant industrialization of parts of North Adams, Adams, and Williamstown. In just half a century, between 1900 and 1950 both the total number of farms and the total acreage of farmland in use declined by 50% (from 3,436 farms to 1,388 farms and 472,288 acres to 202,206 acres respectively) (Historical Census Browser, 2004). In 1950, the total value of all crops produced in Berkshire County was less than a third of what it had been in 1910 ($2,221,180 to $688,347) (Historical Census Browser, 2004). Between 2002 and 2007 Berkshire County farms increased in number (401 to 522), but the total acreage of land in farming decreased (68,630 acres to 66,352 acres), as did the average market value of products sold per farm ($54,178 to $39,465) (USDA Ag Census Berkshire County profile, 2007). As of 2007, over 45% of the land in Berkshire County farms was woodland, 34% was cropland, and 13% was pasture (USDA Ag Census Berkshire County profile, 2007).

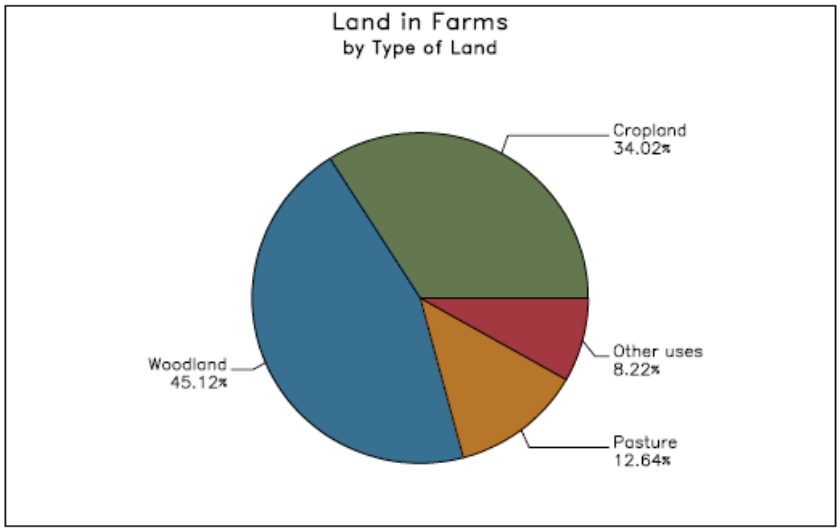


Figure 3: Land use data for Berkshire County from the 2007 Agricultural Census.

Despite these largely negative historic trends, the foodshed analysis showed that Berkshire County has the potential to produce a great deal more food than it is producing currently. A huge proportion of Berkshire farmland is not used for the production of crops. If the correct social and economic conditions exist, much of the land could be restored to its historic farming potential.

With this goal and all the background information in mind, we decided to conduct a survey of local residents to better assess their demand for local food.

Resident Survey

Overview

Our project task was to survey a broad cross-section of northern Berkshire communities to ascertain: where residents buy their food; why they shop at these locations; where people are buying local foods; what the barriers are to consumption of local food; and why residents are or are not supportive of local food. From these surveys, we hoped to generate a blueprint of resident food purchasing habits, particularly with regard to local food produced within the

Berkshire county foodshed. To create our survey we adapted a resident survey designed for the Northampton subregion so that the questions were more applicable to residents of Northern Berkshire County. We removed questions that believed were particularly leading or seemed to have been designed to elicit a certain response from a certain group of people. We also attempted to incorporate ideas and questions from the Glynwood Center resident survey. Our resident survey contained nineteen questions about food purchasing habits and resident demographics. It can be found in Appendix A.

We decided to administer our survey at the major food distribution centers in northern Berkshire County: large supermarkets, food co-ops, farmers' markets, and farm stores or farm stands. We surveyed on October 31st at the Walmart in North Adams, on November 1st and 21st at the Price Chopper in North Adams, on November 5th at Whitney's Farm Market in Cheshire, on November 8th and 9th at the Stop & Shop in North Adams, on November 17th at the Big Y in North Adams, and on November 20th at the farmers' market in Williamstown. These survey distribution and retailer interview sites can be found in the following map. Surveys were also distributed by other members of our local foods group within the larger Keep Farming movement at the following locales: the train stop in Williamstown, Landmark Credit Union in North Adams, Planet Fitness in North Adams, Main St in North Adams, and the Williamstown Farmers' Market.

Figure 4: Map of survey distribution and retailer inteview sites.

At each location we set up a table with a poster signifying what we were doing, clipboards with the surveys, and a bowl containing fresh fruit and candy. We set up near the entrance/exits to the store so that we could invite people both entering and leaving the store to fill out our survey. At first our sign read "Feed the Berkshires," we wore regular college student

clothing (t-shirts, jeans, etc.) and we had only a stool as a "table". Too many people seemed to think we were asking for donations, so we changed the sign to "Local Food Survey," dressed up (business casual), made nametags for ourselves with the Sustainable Berkshires logo on them, and got a real table on which we could lay out four surveys at once. This boosted our response rate from around 8 an hour to over 20 per hour. We also had success with people who hesitated when we asked on the way in by suggesting they fill out the survey, "maybe on the way out?" Almost every person who said that they would fill out the survey on the way out of the store did so. People taking the survey had the option of filling it out themselves or having one of us read the questions to them aloud and then us filling in the survey for them or something in between the two. Survey takers also were informed of the confidentiality of their responses and the non-necessity of completing each question if they were not comfortable answering it.

In addition to the survey being filled-out in person, an online version of the survey was developed for quicker and more widespread distribution. The survey was sent to the members of the local foods groups of the Keep Farming movement who then distributed the link to other residents of northern Berkshire County. While the format may have differed from the analog version of the survey, the same exact questions were asked and none were either removed or added. The wording of a few questions may have been changed to clarify confusion, but the heart of the questions remained and we do not believe this affected any of the responses. 102 of the surveys were filled out online and 195 were administered in person for 297 total surveys administered.

As with any survey or experiment, biases will come into play that could potentially affect the results. The fact that our survey was voluntary certainly created a non-response bias. Only those who were sufficiently motivated by "Local Food Survey" responded. A conservative

estimate would be that of the total pool of people we asked to fill out the survey, approximately ten percent took the time to fill it out. Second, because we surveyed at supermarkets, retail stores, and farmers' markets, the pool from which we could derive responses was limited. It is possible that we missed significant parts of the population for which the results of this project are important, namely low income families or those that live far from population centers. It was suggested that we distribute the surveys at food pantries and soup kitchens, but due to lack of time and knowledge of their locations we did not. Perhaps in the future the remaining members of the local foods group of the Keep Farming initiative in Berkshire County can administer surveys there. Third, the times at which we surveyed may have influenced the results. Typically, we surveyed at the supermarkets and retail/wholesale stores in the late afternoon or early evening on weekdays. The sort of people who do their shopping at those times of day may not be representative of the population. Fourth, because the online surveys were disseminated by members of the local foods group, who are particularly motivated to increase the presence of locally-grown and produced food in Berkshire County, the surveys were likely sent to people who were motivated to increase the presence of such foods, thereby potentially skewing the data in favor of responses pro-local foods. Perhaps it is the case that residents of northern Berkshire County do want more local foods where they currently shop, but on the other hand the surveyed population may not be representative of the whole. Surveying at Whitney's farm stand and at the Williamstown Farmer's Market may have also skewed the data by favoring "foodies", people already invested or interested in local foods, but our surveys at the supermakrters were intended to balance this out. Fifth, our expectations of results may have influenced how we interpreted the data and/or how people responded to the survey. We expected to find some sort of demand

for increased quantities of local food in stores and so perhaps we crafted the questions so as to obtain such responses.

These biases are difficult to quantify, though we will attempt in the results to dismiss a few. Overall, we treated the results of our survey as representative and made recommendations based on that assumption. The data may are the best representation we have, and are helpful in identifying general trends to direct future research, not create a definitive picture of all Northern Berkshire County residents.

The survey can be found in Appendix A. Not all data will be summarized here, but the data file accompanying this report contains all the responses to all questions.

Results

The participants in our survey were predominantly residents of Northern Berkshire County as we had intended, but all the other respondents who indicated a place of residence were from within 20 miles of Northern Berkshire County, and thus were potential buyers of food in Northern Berkshire County.

Respondent Places of Residence

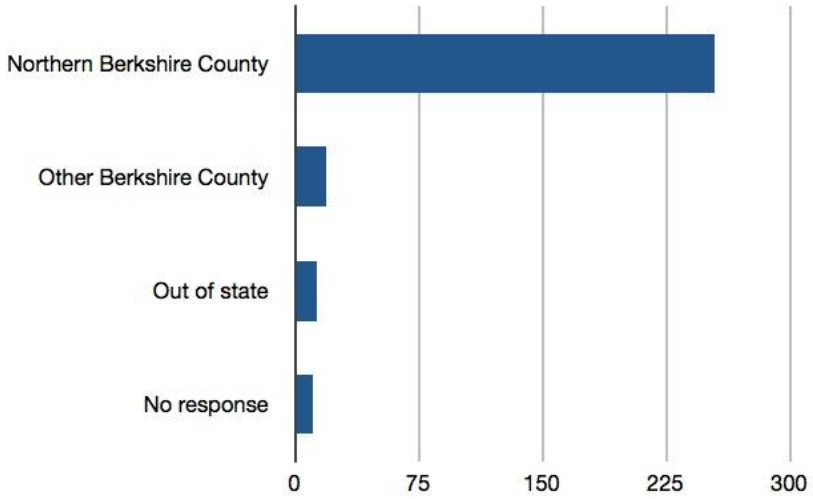


Figure 5: Graph of suvey respondent places of residence. Number of respondents n=297

The purpose of the study was primarily to assess the attitudes and habits of Northern Berkshire County residents, but if farm viability and overall food sales are goals, it may be important to gauge the opinions of more people from outside the county. If Berkshire County were to make a significant shift back to historical levels of agricultural production, it may be important to gauge regional demand in the northeastern United States for Berkshire-grown products.

Respondent Places of Residence by Town

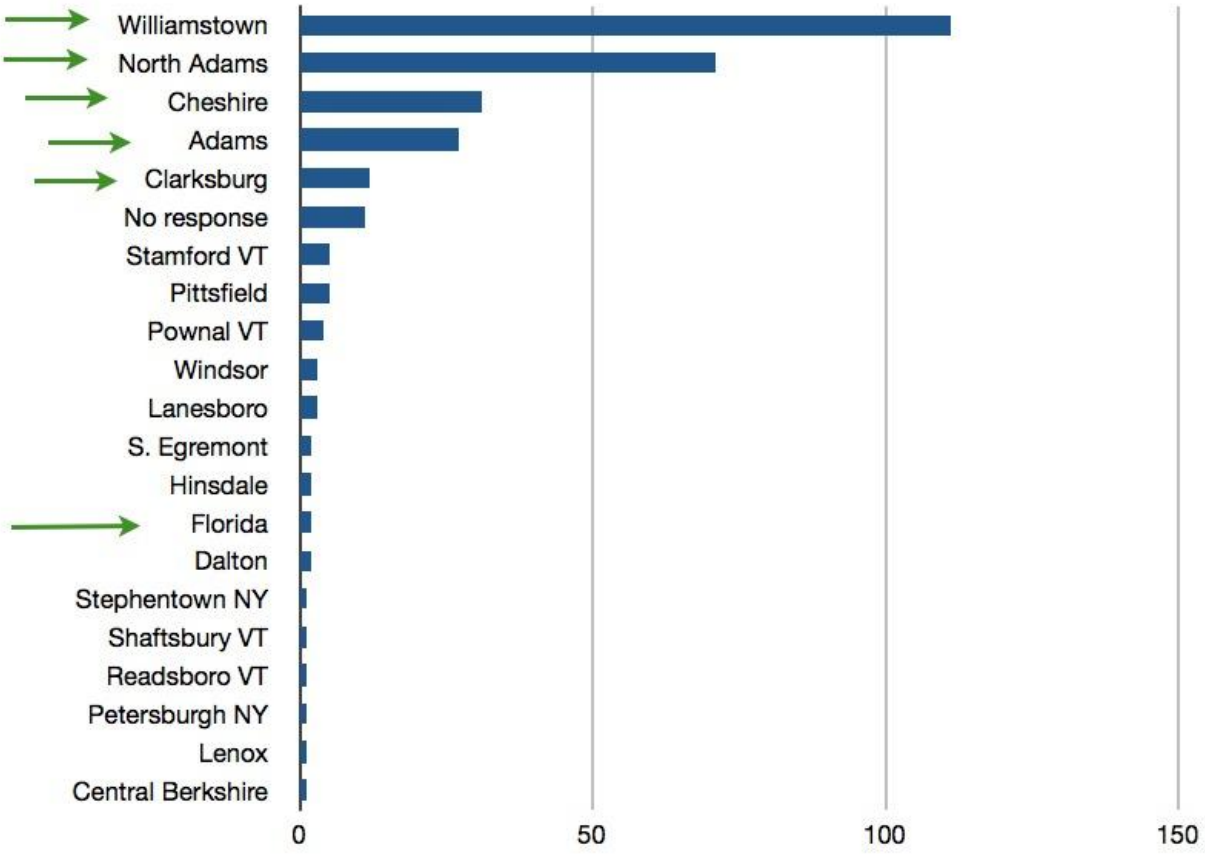


Figure 6: Graph of survey respondent places of residence by town. Number of respondents n=297

Of the 297 surveys conducted, 111 were from Williamstown residents (a higher percentage than the population of Williamstown in Northern Berkshire county) and 71 were from North Adams (the population center of interest). The next three largest response groups were all from Northern Berkshire towns, as indicated by the green arrows. New Ashford and Savoy were the only towns of northern Berkshire county not represented in the survey.

Annual Income Distribution of Respondents

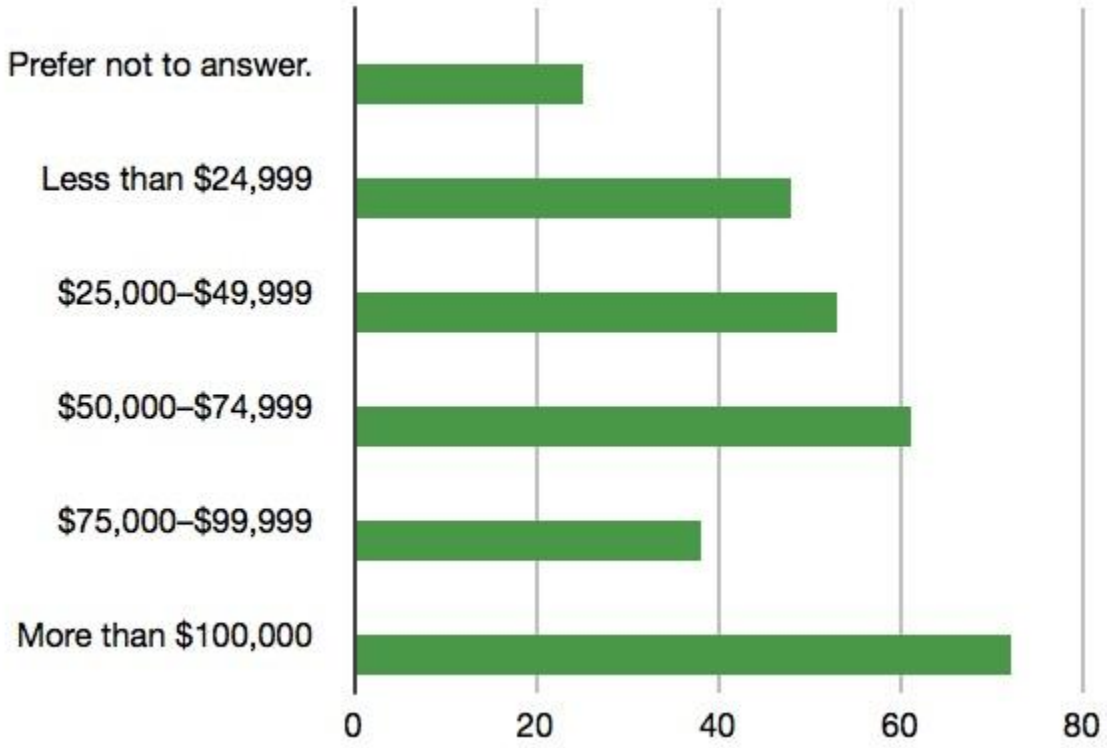


Figure 7: Graph of the distribution of annual income of suvey respondents. Number of respondents n=297

This income distribution is relatively even, and somewhat consistent with the income distribution of Northern Berkshire County as a whole: the median income for Berkshire county is around $42,000 which falls in the median income bracket of our surveys, $25,000-$49,999. Of course the large number of respondents making more than $100,000 a year is not typical of Northern Berkshire County. This is a potential source of bias that we will address and largely dismiss later.

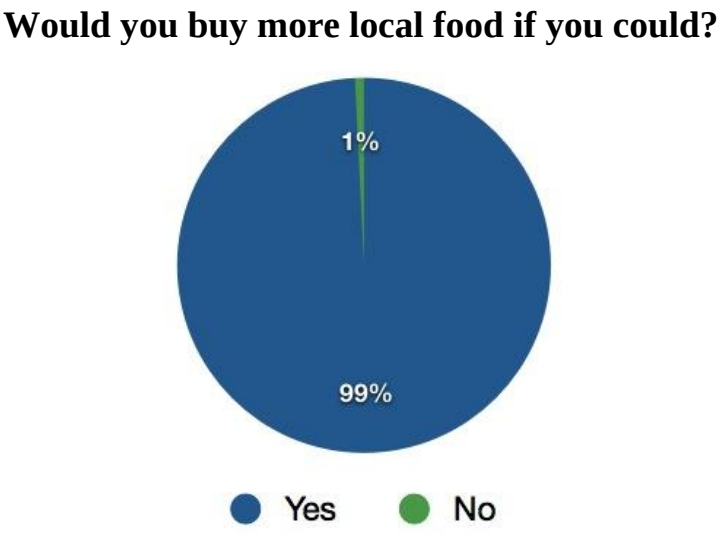


Figure 8: Graph of survey responses to the question, "Would you buy more local food if you could?".

Nearly every single respondent indicated that they would buy more local food if they could. This confirms Amy Kacala's intuition that local foods and farming are of importance to the people in Berkshire County and deserve to be investigated further. Thirteen percent of respondents did not answer this question, but we feel that this does not change the conclusion drawn that residents care about local food. We suspect this non-response was largely due to the format of this question on the survey. This question was not accompanied by a large set of checkboxes as were others on the survey, and therefore it was not readily apparent to respondents.

How often do you look to see where the food you are purchasing is from?

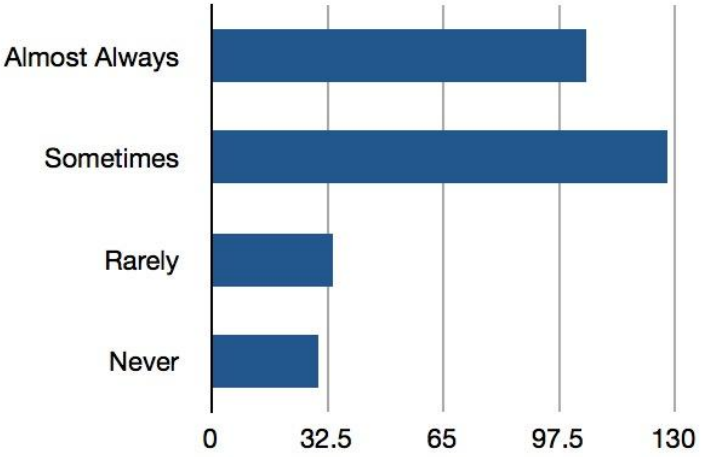


Figure 9: Graph of survey responses to the question, "How often do you look to see where the food you are purchasing is from?". Number of respondents n=297

That approximatly 80% of respondents said that they sometimes or almost always check from where their food comes suggests that Northern Berkshire Couny residents view the knowledge of where their food comes as important.

How many times per month do you shop for food at the following locations?

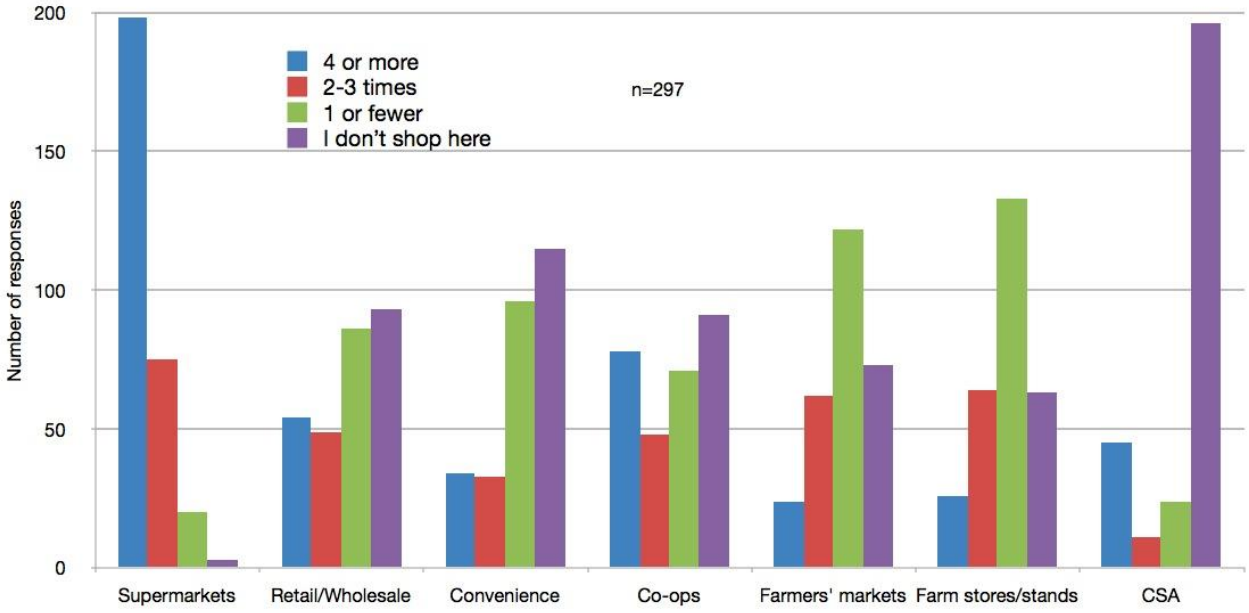


Figure 10: Graph depicting the frequency at which respondents shop at supermarkets, retail/wholesale centers, convenience stores, co-ops, farmers' markets, farm stores/stands, and CSAs.

The possible responses to this question were largely qualitative (it is impossible to average responses and say "people shop at Supermarkets an average of 3.4 times per month), and as such our analysis is largely qualitative. Almost two-thirds of respondents shop at supermarkets four or more times per month. The large number of respondents indicating that they shop at farmer's markets and farm stores/stands one or fewer times per month reflects a common sentiment heard while administering the surveys in person: people checking the corresponding box often said something along the lines of "I wish I could go to these places (farmer's markets/farm stores) more often but they are too expensive, too far away, or only happen once a month." Most people also do not have a share in a CSA (Community Supported Agriculture), and many respondents mentioned that they did not know what a CSA was. One potential source of bias is that some people may have indicated that they shop at Walmart a

certain number of times per month, but not necessarily for food. Walmart was the only food distribution option on the list that sells predominantly non-food items.

Figure 11: Graph depicting survey responses to the question of why respondents shop at the locations indicated in the previous graph. Number of respondents n=297

Respondents were asked to check up to 3 responses to the question above. The two most common responses were "Convenient Location" and "Affordable." This consumer concern with price and location is a theme continuously observed throughout the results.

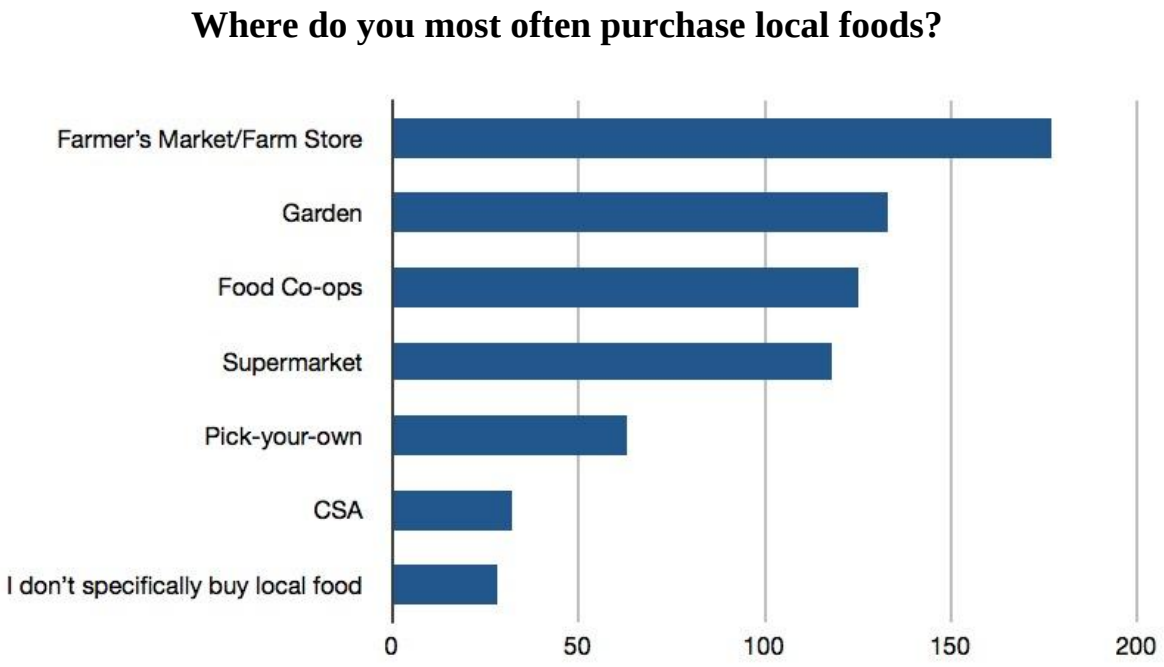


Figure 12: Graph depicting survey responses to the question of where respondents purchased local foods. Number of respondents n=297

Respondents were asked to indicate all locations at which they buy local food. The results were a relatively even distribution among locations. Farmer's markets and farm stores was the most frequently-occurring response, consistent with the large numbers of people who indicated they shop at those locations at least once per month. Gardens, food co-ops and supermarkets were all a close second, each with similar numbers of respondents indicating those locations as a site of local food purchasing.

Why do you buy local food?

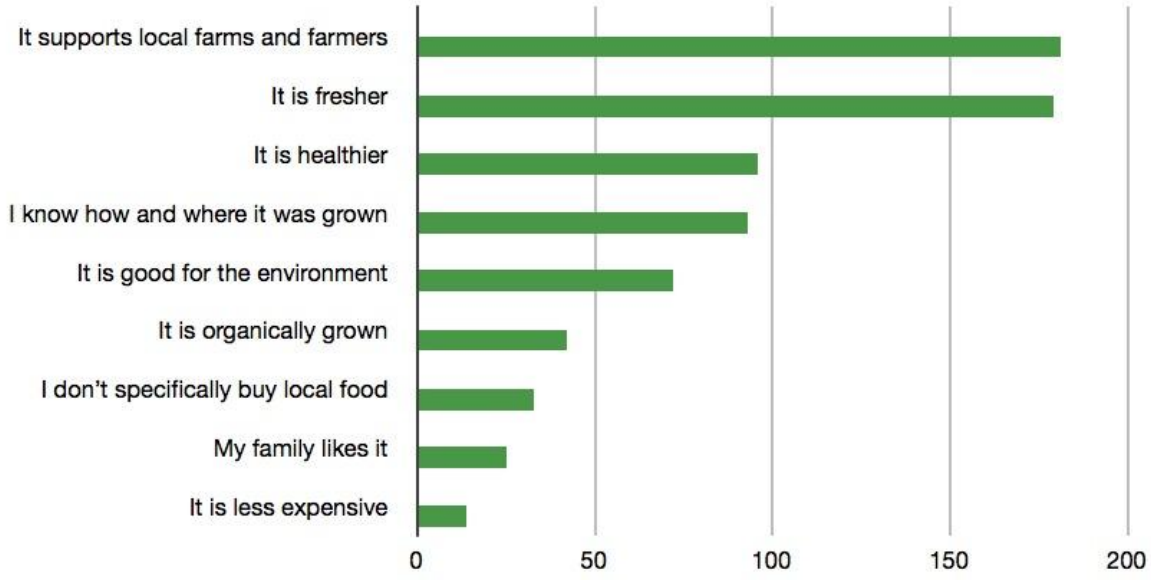


Figure 13: Graph depicting survey responses to the question of why respondents purchase local foods. Number of respondents n=297

Respondents were again asked to check up to three responses to the question above. The most two common responses were "It supports local farms and farmers," and, "It is fresher." Very few respondents indicated that they purchased local food because it was less expensive.

What prevents you from buying any or more local food?

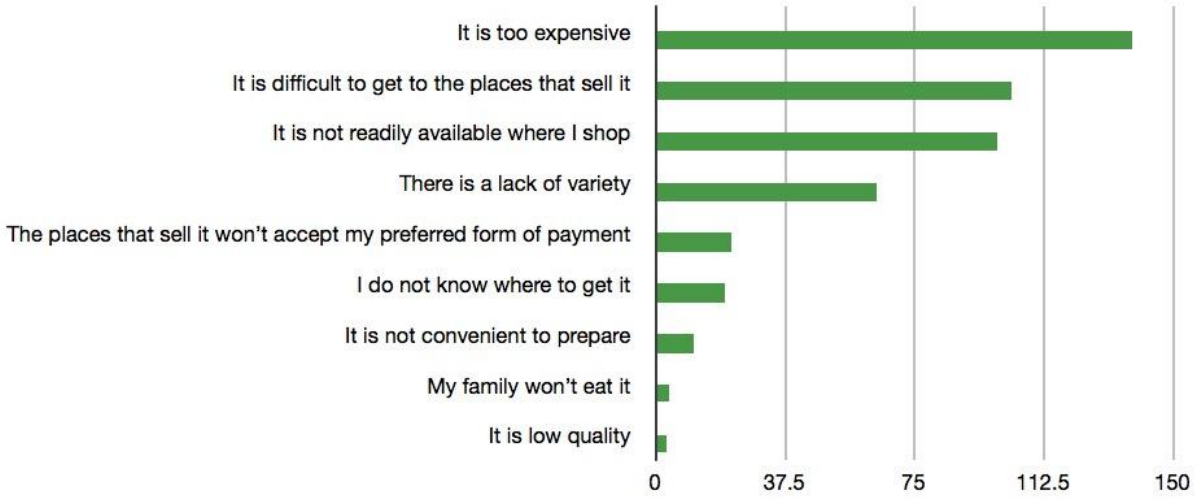


Figure 14: Graph depicting survey responses to the question of what prevents the purchase of local foods. Number of respondents n=297

The most common barriers to increased purchase of local food appear to be that it is too expensive, that respondents had difficulty getting to the places that sell it, and that is not readily available where they shop. Again, the two major concerns of the consumers appear to be price and location.

What are some of your favorite locally produced products? (See Appendix C)

Appendix C shows a word frequency map where the size of each word indicates the frequency of response to the question above. Some of the most popular responses were vegetables (veggies), fruit, apples, corn, tomatoes, eggs, and cheese. The large number of words overall indicates that consumers are relatively aware of the wide variety of things that can and do grow in Berkshire County, and that they have positive associations with specific individual

products like “strawberries” or “florida mountain turnips,” and not simply “local fruit and veggies.”

What are some products that you would like to see grown/produced in Northern Berkshire County? (See Appendix D)

Appendix D shows a word frequency map for the responses to the question above. The most popular response by far was “meat,” indicating a lack of supply in the Berkshire region. This is likely due to the lack of an approved slaughterhouse or other processing facility in the region, an issue we will address later in the report. Respondents indicated that they still want more local fruit and vegetables, though they are already getting some. Also mentioned were local grains. Some products mentioned, such as mangoes or avocados, are not likely to be grown locally even in greenhouses, due to climatological constraints.

Addressing Income Biases

To address the potential income bias indicated earlier in our results, we broke down the responses to two questions by the top and bottom income brackets. Assuming that income were a factor, the large differences in preference and behavior between the highest and lowest income brackets would be readily apparent.

Where do you buy local food?

(by top and bottom income bracket)

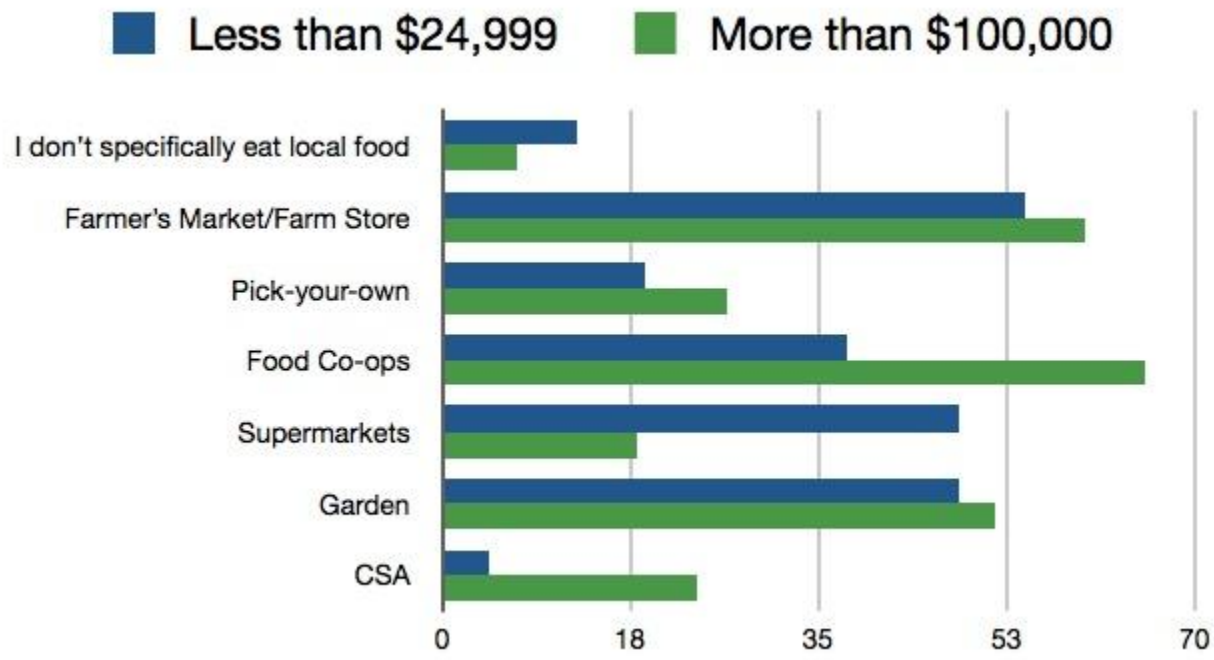


Figure 15: Graph depicting the percent of survey responses of the top and bottom annual income brackets to the question of where one buys local food. Number of top income bracket respondents n=48 Number of bottom income bracket respondents n=72

On the whole, there is not a large disparity between these two groups. Though more respondents from the top income bracket buy local food at food co-ops, almost 40% of respondents from the lowest income bracket also said that they buy local food from food co-ops. A smaller number of respondents from the top income bracket buy local food at supermarkets,

which is an important distinction. But from other questions in the survey, it is known that those in the top income bracket still shop at supermarkets with some regularly, so supermarkets are still an important part of the solution. In short, the differing preferences of those in the top and bottom income brackets do not seem to indicate a source of bias that calls the representativeness of our other data into question.

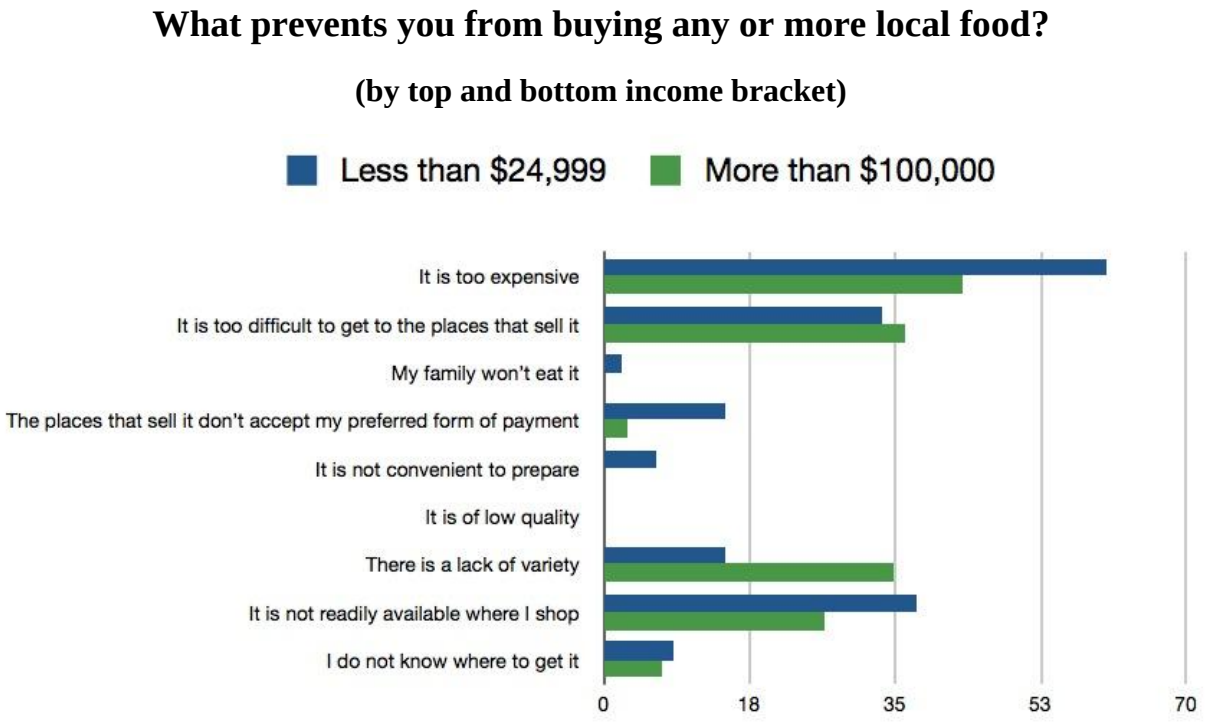


Figure 16: Graph depicting the percent of survey responses of the top and bottom annual income brackets to the question of wha prevents one from buying any or more local food. Number of top income bracket respondents n=48 Number of bottom income bracket respondents n=72

Among barriers to the purchase of more local foods, the differences between the two income brackets are less severe, though, as expected, price is a larger consideration for those in the lowest income bracket. If there were bias from surveying a disproportionately high number of residents in the top income bracket, this would make price seem like less of a concern than it might actually be for the average consumer. Clearly from our earlier analysis we have still identified price as a major concern so there is no evidence of bias here. Again, there are

important differences but the incomes do not appear to have biased the general trends we observed in the data.

Other Data

Our survey contained more questions than those reported above, but most of the remaining data in our data set will be more useful in comparison to future data. For example:

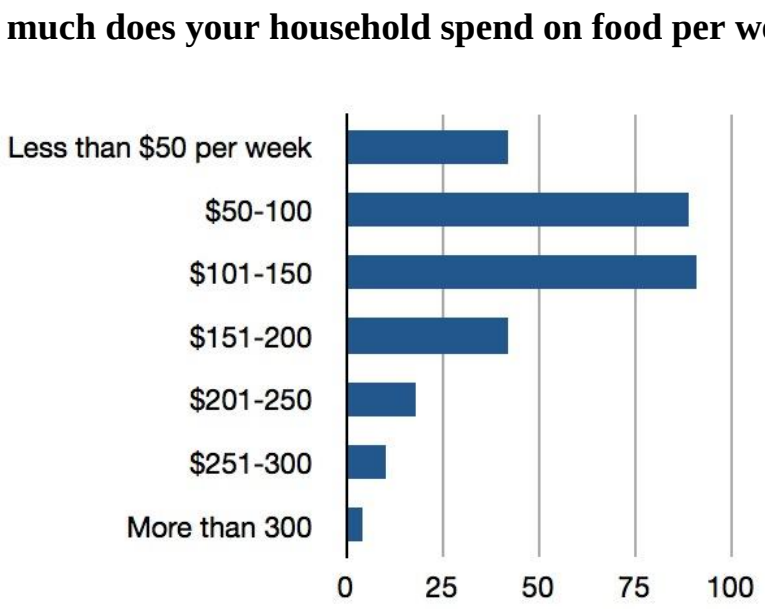


Figure 17: Graph depicting survey frequency of response to the question of how much one's household spends on food per week. Number of respondents n=297

This question will be an important one for the Food Economics team, but it should be paired with household size data to determine the average food expenditure per person in the county. We asked for household size data on our survey, but the response rate was somewhat low. More importantly, the amount of money each person spends on food each week will be a much more relevant piece of information when concrete plans are being considered, such as "Would a new CSA outlet in North Adams be viable?" We also gathered data on how often people eat out at restaurants, and most answered "rarely" for all different categories of

restaurants, but again had a low response rate. If restaurants become a larger part of the solution, the other teams will be able to consult the data we did gather on this question.

Furthermore, as the other teams begin to discuss the implications of the general trends we observed, they may want to identify the preferences and behaviors of target populations (identified by income, age, etc.) and therefore run more cross-category analyses similar to the analysis we with the two different income brackets.

Lastly, there are an abundance of good quotes and suggestions respondents wrote in the available space at the end of the survey, many of which would be useful in future publications for the Feed The Berkshires part of the Keep Farming® program. They also paint a good picture of consumer attitudes in general and would be good for anyone attempting to get a more narrative account of consumer attitudes.

Implications

Do northern Berkshire County residents want more local food? Absolutely. All of our data pointed toward this conclusion. The consumers are, on the whole, aware that local food is out there, they simply have trouble finding it or cannot afford it. People indicated that they like local food because it supports local farms and farmers, which is evidence of an ethical, external, community value, but they also like local food because it is fresher and/or healthier, which is a personal value. The confluence of these two things makes the prospect of local food quite appealing: local food can help revitalize the community but individuals also have a personal incentive to achieve that goal. The strong personal connection to specific local food items indicates that consumers already enjoy the concept of local and are ready to have more positive experiences with it. They also seem to appreciate the seasonality and variability of local produce,

simultaneously understanding that not everything can be grown here all the time, but that there is more than just lettuce and kale. One respondent wrote, "I think changes in food we eat with the seasons is something to celebrate. It is strange to eat a strawberry in January."

Price and location, the main consumer barriers to local food consumption, were what we expected to find before administering the survey, but these findings still help focus future efforts. It was important that people selected "It is difficult to get to the places that sell [local food]" as one of the barriers, since this indicates an awareness that there is local food they are not seeing or not accessing as much as they want to. This sense was confirmed by the in-person comments of respondents mentioned earlier. There is another set of respondents who answered the question about barriers with "It is not readily available at the places I shop," suggesting a more fixed decision about where one shops and a hope that local might come there.

In conducting the surveys and visiting all the stores, we had some of our own thoughts on the accuracy of all these consumer attitudes.

Price: Is local food really more expensive?

We reject the prevailing notion that local food is more expensive than conventional produce. On average, local food is more expensive; otherwise it would be sold more often in supermarkets. It depends what, when, and where one is buying. At peak season for certain produce, prices will be lower than at other times of the year. CSA shares are almost certainly cheaper by unit cost, but they require one to eat a lot of produce of varying types. Root vegetables are notoriously cheap, easy to grow in the rocky soils of Berkshire County and can be stored through the winter, but many consumers do not know how to cook or store them. Farmers usually have to mark up their prices at farmer's markets since they have fewer opportunities to

sell and are more likely to find specialty buyers who are willing to pay a lot for special once-a-month items, as opposed to daily shoppers who demand the lowest price. Processed local foods like cheese and meat also end up as specialty items due to the lack of volume or processing facilities in this area. These are issues of scale, which also cause local food to appear more expensive at small places like Wild Oats and not to appear at all at some large retailers, which we will address later.

On average prices are high, but this is not an intrinsic characteristic of local food.

Location: What makes a good local food distribution location?

Many local food distribution options already exist. Deciding which ones to support requires a discussion of community values. For example, one could look at the fact that most people buy local at farmer's markets and farm stands as evidence for creating more farmer's markets and incentivizing the construction of more farm stands. On the other hand, one could look at the fact that most people shop regularly at supermarkets and decide to focus local production on supermarket sales which might force out certain farmers and customers that prefer small scale production. These decisions also depend on defining target populations. The supermarkets are located in all the population centers, but many residents still cannot walk to them. Many respondents mentioned that they get food from gardens, often from neighbors or family members. Educating more residents on home gardens could feed a lot of people cheaply, but it hurts the demand for larger scale farmers, retailers, businesses and leaves out those with no land on which to grow. There is a food desert in the mountains of Florida and Savoy where people live more than 10 miles from a supermarket which certainly makes them a target

population, but any new food outlet in that location would likely suffer from a lack of scale and would only increase local food consumption in a small population.

Consumer-side Recommendations

The alternatives mentioned above are not specific recommendations, but serve instead as indications that more data needs to be gathered on the consumer question. With the aforementioned implications in mind, we recommend that the other teams of the Keep Farming® effort pursue the following things:

1. Price comparison between local and conventional foods. Where and when is local food more expensive?
2. Quantitative economic analysis of demand. Given that increased scale will lower costs, removing one of the main barriers to consumption, how much local food could all the residents of Northern Berkshire County actually eat?
3. Discuss community values and target populations. Where are the most critical geographic areas in need of growth, and what tradeoffs between different target populations are you willing to make?

We feel our survey has established that consumers are excited about local food and understand why it is important, and we have exposed the main barriers to their increased consumption of local food. Given the ripe consumer climate, our recommendations are intended to gather the data necessary to remove the barriers of price and location and to capitalize on the high demand for local foods.

In anticipation of the additional consumer-side data gathering, we began discussions with retailers since they are in a good position to capitalize on local food demand and will likely be a part of the solution.

Retailer Interviews

Overview

Additionally, we interviewed local grocery store managers to find out how different retailer's policies affect local farmers and their options for marketing products. We designed our retailer survey to answer some of the questions from the Glynwood Keep Farming® handbook, but also to specifically answer questions regarding barriers to the acquisition and sales of local products (see Appendix B for retailer interview guide). The surveys were administered in an informal interview format using questions from the survey as a guide to discussion. Interviews from the Wild Oats Coop, Price Chopper, and Stop & Shop, Big Y, and Walmart illuminated common barriers for local producer's access to retail markets as well as how different retailer policies affect the quantity of local produce in their stores. Since the definition of "local food" can vary, we also included a question about the retailer's definition of "local food" (from a company standpoint). Other food retailers in the area, as well as Whitney's Farm Store in Cheshire should be interviewed in the future in order to develop a better picture of obstacles and opportunities for better integration of local foods into the market on a case by case basis.

Interview Synopses

Price Chopper, North Adams

According the produce manager of this branch of Price Chopper, the Price Chopper definition of "local" food is whether or not farmers delivered their produce straight to the store or

go through the company warehouse. Total price of acquisition is most often the deciding factor in purchasing the products they sell, so sometimes local farmers can actually undercut others because of reduced shipping costs (since they are able to deliver straight to the store). Another advantage of local producers from the retailer's standpoint was their flexibility. When a product runs out in the store, the produce manger can simply call a local producer and the producer can deliver that day, whereas it can take two to three days to change a weekly order with their conventional distribution company. Price Chopper customers are mainly looking at prices when they shop, so "no one is specifically demanding local," but when the store does stock local produce customers buy it. Likely because there is no specific demand for local, local farmers approach Price Chopper when they want to sell their produce in the store. Any local farmers that approach Price Chopper are sent "straight to corporate" for approval. Price Chopper has its own highly experienced corporate inspectors who go to inspect USDA certified farms within days of the request. According to the produce manager, it is relatively simple for new farmers to become involved (Price Chopper produce manager, personal communications 2011). The attitude towards local farms at Price Chopper was generally supportive although their motivations differ; the grocery manager stated that they "need more local farms so that competition will drive the prices down".

Stop & Shop, North Adams

Russ, the produce manager at Stop & Shop, cited the company's definition of local as "within 500 miles of the store" meaning that almost "anything produced in the northeast" "and a little bit more than that" is considered local food by corporate standards. Factors influencing the store's purchasing of the products it sells include convenience, price, freshness, quality, where the product is from, and customer's preferences; religious restrictions and how the product is

grown do not impact the store's purchasing habits. When asked what percentage of sales are locally grown or produced, he didn't know. He cited production volume and formal certification as a vendor as significant barriers to the store's acquisition of local products. He did not elaborate on specific store policies for certification as a vendor other than that when small farmers approached the store in order to sell their products they had "a lot of paperwork" to get through. Although some customers "like having the selection" of local and organic products, he admitted that "organic doesn't sell half as well" because of the added cost. When asked if there is demand for locally grown or produced products which cannot be met by current local supply he responded "definitely", citing the closing of Green River farms as a loss to the regions apple production and adding "anything they (the customers) can get local, they (the customers) buy it".

Wild Oats, Williamstown

At Wild Oats Coop we met with several managers including the produce manager, the meat/seafood manager, and the sales manager. The Wild Oats definition of local food is displayed clearly in their store: Local food is food grown or produced within 100 miles of the store. Factors affecting their decisions to purchase products to be sold in their store included price, freshness, quality, where the product is from, customer's preferences, and how the product is grown. Although price is important, the store is "willing to bring it in" and "take a lower margin on local" goods. They emphasized their lack of contractual restrictions and none-exclusivity with their vendors as an important store policy, and several points made in later discussion highlighted their inattention to convenience as a deciding factor, particularly in regards to local products. Approximately 33% of all sales are locally grown or produced products.

We had an in-depth discussion of barriers to the acquisition and sale of local products as well as Wild Oats store policies in regards to product acquisition. When asked whether local farms approached them or if they approached local farms to acquire products for store sales, they answered "both" and shared some of their best strategies. The sales manager gets "more than a dozen phone calls a day" by vendors that want to supply their products for sale in the store and they mostly find producers by "word of mouth" and "good tips" on local producers from other coops or vendors they already have a relationship with. Oftentimes it is easiest to deal with vendors that already have a good relationship with the coop, so the store is more likely to sell multiple products from one vendor. Significant barriers to the acquisition of local products include "shipping costs" (presumably for the vendor), volume issues, quality issues, and a "lack of business savvy" on the part of the local vendor. They elaborated on the "lack of business savvy" of some vendors, citing an example of a local cheese maker that could not understand why Wild Oats refused cheese damaged in the shipping process. Some vendors just "need to understand how retail works" and that Wild Oats cannot sell their products for the same prices as they do at farmers markets because they need to pay for storage, shipping, and retail costs. Wild Oats has to refuse local products that don't sell, have quality issues (they used an example of too many bugs in raspberries), or if they don't know how or where the product was grown (they used an example of a non-certified mushroom forager wanting to sell his finds). A barrier to the sale of local products is the lack of understanding on the part of customers as to the difference between local, organic, and conventional products and why they would be priced differently.

When asked about demands for local foods not being met and the potential for growth in the local food movement, the answer was a resounding yes to both questions. Local fruits are nearly impossible to keep on the shelves, peaches and all types of berries being particularly

difficult to acquire in the volumes necessary to keep the shelves stocked. Unfortunately, "no one wants to grow fruits, especially berries" because "they're just too volatile", "one bad year and you're done for". Local growers on the whole do fairly well responding to consumer demand; every winter Wild Oats management sits down with its growers to ask them for specific products and growers "are usually pretty good about following through". Produce sales at Wild Oats have grown 17% in the last year and farmers are saying that this year was "the best year ever" at local farmers markets.

Big Y, North Adams

Paul Lucia, department manager of produce and floral arrangements, defined locally grown or produced products as anything from within the northeast. Factors that influenced product purchasing decisions included convenience, price, freshness, quality, where the product is from, customer's preferences, religious restrictions, how the product is grown, and contractual restrictions. When asked about percentage of sales that come from the sale of local produce, Mr. Lucia did not know the figure. Seasonal availability was found to be a barrier to the purchase of local products, and consumer demand and lack of knowledge were tabbed as barriers to the sale of such products. While the typical customer is fine with conventionally-grown produce, he/she is content to purchase local produce when it is available in the summer. It is unclear if the following statement of Mr. Lucia is being interpreted correctly: locally grown/produced products could not be supplied to Big Y at times due to the need to maintain consistency. A supplier of local products must supply the whole chain or nothing of that supplier is stocked at all.

Walmart, North Adams

From an interview with Linda Gibbons, food department manager at Walmart in North Adams, it was learned that that particular branch does not currently sell any locally grown/produced products. Due to the store's lack of local products, Mrs. Gibbons was unable to give a definition of local food. She did say, however, that the store sold watermelons in the summer that came from a local farm, yet she was unable to say exactly which farm this was. Thus, a significant barrier to the acquisition and sale of local food at Walmart is corporate demand, or the lack thereof. Walmart only stocks produce in its Super Walmart branches, and so the likelihood of finding locally grown/produced products, let alone produce, in a normal Walmart store is very slim. Despite the appearance of being in favor of local foods on its website, Walmart is not uniformly committed to local foods, or at least on the basis of this interview. Fortunately, Mrs. Gibbons mentioned that a Super Walmart is slated to be constructed nearby the current Walmart in North Adams, so the possibility of local food being in stock will be significantly increased. On a sidenote, Mrs. Gibbons shared an anecdote that she has her own personal garden in which she grows vegetables. While Linda Gibbons as food department manager of the North Adams branch of Walmart might not be in favor of local food, Linda Gibbons as a person would certainly be. When asked what she thought could be done to spur sales of local foods, she suggested something similar to a farmers' market be set up in front of the store. In this way, people could acquire locally grown produce in addition to other groceries while shopping at Walmart.

Implications

The store policies of large retailers are significant barriers, if not active hindrances, to the acquisition and sale of locally grown or produced products. For the majority of the retailers we interviewed, the process of acquiring food, local or otherwise, involves significant paperwork

and corporate bureaucracy. The difficulty in acquiring foods provides a disincentive for retailers to make changes that would involve even more paperwork and bureaucracy. Significant changes to bureaucracy, such as those necessary to streamline the certification of local food producers, would be costly to retailers. Due to the currently small scale of local production, there is not a large benefit to offset the cost of retailers retooling their business model.

Price and volume were two issues that came up somewhat frequently in the interviews with retailers. While retailers have an incentive to sell quality goods to their customers, these retailers are also businesses and in the end what matters is how much profit (or how little deficit) is generated. If the acquisition and sale of conventionally grown foods will generate a larger profit than the acquisition and sale of locally grown foods, then retailers will most likely sell conventional, with Wild Oats being a notable exception. With volume, there is concern on the part of the retailers that suppliers of local food cannot meet the quantity demanded to make an adequate profit margin. Most local producers would need to make drastic changes to increase their supply enough for the large retailers, and this could begin to blur the boundary between local and conventionally grown food.

On the whole for retailers, there is a general sense of ambivalence towards local food: they are not against, but also not necessarily for the sale of local food. From the retailer websites, one gets the impression that they are highly supportive of local food. After having a dialogue with them, however, one comes to understand that this outward appearance of support is largely for publicity. Many retailers feel that consumer demand is not high enough to justify the higher costs of purchasing local food. The concerns of all retailers are largely the same: they cannot stock local food if they do not feel it will sell. It is good that retailers are willing to have a

discussion about local foods, but much remains to be done to eliminate, or at least mitigate, the biggest obstacles: corporate bureaucracy and high prices.

Retailer Recommendations

The retailer recommendation is simple: continue consulting with the retailers that have already been interviewed and start discussions with other retailers and food distributors that have not been contacted. This includes CSA distributors, farmers who bring their products to farmers' markets, farmers with farm stands, and farm stores, such as Whitney's Farm Market. Currently, retailers have a lot of control over the flow of local food to consumers. Understanding their motivations and the advantages of their infrastructure will be crucial to solving the local foods problem: "If everyone wants it, why aren't more people buying it?" Our Retailer Interview Guide (Appendix B) is a good source, but it is primarily a tool for building relationships. Once relationships have been developed and different action plans are being considered, more intense questioning will be necessary.

Supply-side Recommendations

We did not attempt to touch on this in our report, but it is clearly important to talk with farmers in their role as producers of food. Amy Kacala suggested the farmers are willing to do almost anything to stay viable, but their preferences are important. Are they interested in increasing their supply of local food to retailers, CSAs, farmers' markets, et cetera? How would they be able to meet this potential increased perceived demand? Would they even be capable of doing so? What sort of barriers prevent them from supplying any or more local food to retailers? How much of a profit do farmers generate from selling their goods to retailers, CSAs, farmers

markets? This is obviously a job largely for the Farm Economics team, but we wanted to remind the Local Foods team that supply is also one of their areas of investigation.

Lastly, a more in-depth look at the policy barriers created by the retail corporations themselves and by federal, state, and municipal laws will be important in order to create concrete, lasting changes. We have included an extensive primer on the relevant policies in Appendix E to express the complexity and to encourage another team to pick up this issue. Policy barriers restrict the entry of new farmers, the production of existing ones, and the sale of farm products. Understanding these policies will be an important step in making it easier for farmers to produce local food, retailers to buy it, and customers to eat it.

Conclusions

There is a definite desire for and awareness of local food by the residents of northern Berkshire County. The major concern to the residents is the general convenience of acquiring local food: how much does it cost and where can they get it? Further research should be able to answer these questions and direct future action. This future action will likely be a combination of: 1) educating the public on the current price and location of local food and 2) taking steps to lower the price and increase the number and convenience of locations where local food is available. While large retailers in northern Berkshire County may not be opposed to local food, at the same time they are not actively supporting it. If major retailers are a target outlet, price and corporate policies are two obstacles that must be overcome for the sale and consumption of locally grown/produced products to become a more viable option to a broader spectrum of people. Penetrating the corporate structure is not a simple task and will involve further research and data gathering. Increasing volume at other local food outlets like food co-ops, farmer's

markets and farm stands is a more flexible option but has less existing infrastructure to work from and will require business plans and imaginative solutions. Other pieces of the food puzzle must be investigated by the Keep Farming movement for a better assessment of the future of local food in Berkshire County: farmers, policy, nutrition, natural resources, and, perhaps most importantly, community values warrant further examination. People want local food, something Berkshire County is not quite ready to provide; it is up to Keep Farming to deliver.

Acknowledgements

First, we would like to thank Amy Kacala of the Berkshire Regional Planning Commission for recruiting us for this project through ENVI 302 Environmental Planning. Additionally, we would like to thank Sarah Gardner, our professor and associate director of the Williams College Center for Environmental Studies, for her assistance throughout the project. Without her, this project would not have been possible.

We would also like to thank Mark Maloy, also from the Berkshire Regional Planning Commission, for providing us with useful GIS maps of northern Berkshire County. Thanks must be extended to Hank Art, Rosenburg Professor of Environmental Studies and Biology, though currently on sabbatical, for his knowledgeable suggestions and comments. A big thank you to the other members of the local foods team of subregion 2 (northern Berkshire County) in the Berkshire Keep Farming effort. In addition to aiding in the administration and dissemination of surveys, the future of this project is dependent on them from this point forward.

Lastly, we would like to thank the following people of food retailers in northern Berkshire County for allowing us to interview them and provide useful insights into the politics of local food in relation to retail: Russ, produce manager at Stop & Shop in North Adams; Renate Kopynec, Robin Riley, and managers from Wild Oats; Paul Lucia, manager of produce

and floral arragements at the Big Y in North Adams; Linda Gibbons, food department manager at the Walmart in North Adams; and Rick, grocery manager at Price Chopper in North Adams.

Figure 18: The Local Foods team with Sarah Gardner and Amy Kacala.

References

"Adams, Massachusetts." <http://www.city-data.com/city/Adams-Massachusetts.html>.

"Agricultural Preservation Restriction Program (APR)." 2011. Massachusetts Department of Agricultural Resources. <http://www.mass.gov/agr/landuse/APR/index.htm>.

Art, Hank. Professor of Biology. Personal communication by Sara Dorsey, 6 December 2011.

"Berkshire County, Massachusetts." <http://www.city-data.com/city/Berkshire_County-MA.html>.

Bureau of Labor Statistics. 2007. "Consumer Expenditure Survey."

"Census of Agriculture: Berkshire County, Massachusetts." 2007. United States Department of Agriculture. <http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Massachusetts/cp25003.pdf>.

"Cheshire, Massachusetts." <http://www.city-data.com/city/Cheshire-Massachusetts.html>.

"Clarksburg, Massachusetts." <http://www.city-data.com/city/Clarksburg -Massachusetts.html>.

Emigh, Vashti, Kathleen Durante, and Anthony Raduazo. "Berkshire County Foodshed Analysis: A Study for the Berkshire County Regional Planning Commission". December 2010. <http://web.williams.edu/wp-etc/ces/berkshire-foodshed.pdf>.

"Farm Bill Programs." 2011. Northeast Sustainable Agriculture Working Group. <http://www.nefood.org/page/farm-bill-programs#top>.

"Florida, Massachusetts." <http://www.city-data.com/city/Florida-Massachusetts.html>.

Food and Drug Administration. "Safer Fruits and Vegetables: FDA Aims to Set Production Standards." 11 July 2011. United States Department of Health & Human Services. <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm262031.htm>.

Food Safety and Inspection Service. “Fact Sheets: Production & Inspection: Slaughter Inspection 101.” 6 April 2010. United States Department of Agriculture. <http://www.fsis.usda.gov/Fact_Sheets/Slaughter_Inspection_101/index.asp>.

Food Safety and Inspection Service. “Regulations & Policies: State Inspection Programs.” 19 May 2011. United States Department of Agriculture. <http://www.fsis.usda.gov/regulations_&_policies/state_inspection_programs/index.asp> .

Gardner, B. 1992. “Changing Economic Perspectives on the Farm Problem.” *Journal of Economic Literature*. 30 (1): 62-101. <http://www.jstor.org/stable/2727879>.

Gibbons, Linda. Food Department Manager at the North Adams branch of Walmart. Personal interview by Brandon Abasolo, 12 December 2011.

“Historical Census Browser.” 2004. University of Virginia, Geospatial and Statistical Data Center. <http://fisher.lib.virginia.edu/collections/stats/histcensus/index.html>.

“Inspections.” <http://www.foodsafety.gov/keep/government/inspections/index.html >.

“Keep Farming Kickoff Event: A Community Forum to Address the Future of Local Farms & Local Food.” 24 October 2011. WilliNet. <http://willinet.org/content/keep-farming-kickoff-event-community-forum-address-future-local-farms-local-food>.

Kennedy, Jeff. Williamstown Board of Health Inspector. Personal communication by Sara Dorsey, 7 December 2011.

Lucia, Paul. Manager of Produce and Floral Arrangements at the North Adams branch of Big Y. Personal interview by Brandon Abasolo, 12 December 2011.

“New Ashford, Massachusetts.” <http://www.city-data.com/city/New-Ashford-Massachusetts.html>.

"North Adams, Massachusetts." <http://www.city-data.com/city/North-Adams-Massachusetts.html>.

Northeast Organic Farming Association, Massachusetts Chapter. "NOFA Massachusetts Raw Milk Network. 5 October 2011. <http://www.nofamass.org/programs/organicdairy/rawmilk.php>.

"Savoy, Massachusetts." <http://www.city-data.com/city/Savoy-Massachusetts.html>.

Town of Williamstown, Massachusetts. 16 May 2006. "Right to Farm." In *Williamstown Bylaws*. <http://williamstown.ws/wp-content/uploads/2010/10/ch46righttofarm.pdf>.

Town of Williamstown, Massachuetts. 20 May 2008. "Zoning Bylaws." In *Williamstown Bylaws*. <http://www.jjmanning.com/zoning/08-1068%20zoning.williamstown.pdf >.

"The United States Summary Information." 2011. *2011 Farm Subsidy Database*. Environmental Working Group. <http://farm.ewg.org/region.php?fips=00000&regname=UnitedStatesFarmSubsidySummary >.

"Williamstown, Massachusetts." <http://www.city-data.com/city/Williamstown-Massachusetts.html>.

Appendices

Appendix A: Resident Survey**;** Due to document restrictions, the version here is not properly formatted. A properly formatted version in a separate document exists with Sarah Gardner of Williams College who can be reached at Sarah.S.Gardner@williams.edu

Date: _____

Location: _____

Interviewer: _____

Feed the Berkshires: Northern Berkshire County Residents Food Survey

Thank you for your willingness to participate in the Northern Berkshire County Residents Food Survey. This survey is being conducted by citizen volunteers interested in learning more about how northern Berkshire County residents shop for food. The project is sponsored by the Berkshire County Regional Planning Commission and the Glynwood Center.

Your answers will be kept strictly confidential, and your information will not be added to any kind of list for email or other communications or solicitations. The survey should take approximately 5 minutes.

We are only surveying Berkshire County residents. In order to make sure we collect an accurate cross-section of Northern Berkshire County residents, we need to make sure we talk to residents from every town.

1. Can you please tell us what town you live in?

……

2. Below is a list of many places where one can get food in the northern Berkshire County area. Please check the box that shows about HOW MANY TIMES PER MONTH you get food at each.

	4 or more	2–3	1 or fewer	I don't shop here
Large supermarkets, such as Big Y or Stop & Shop				
Large retail or wholesale stores such as Wal Mart				
Convenience stores, such as Cumberland Farms				
Food co-ops, such as Wild Oats Market				
Farmers markets				
Farm stores or stands, such as Whitney's or Lakeview Orchard				
A CSA (Community Supported Agriculture) farm share				
Other (please describe):				

3. What are the MAIN REASONS you shop there (up to 3)?

	Check up to **3**
Affordable prices	
Accepts forms of payment I want to use	

Convenient location	
Convenient hours	
Comfortable with store layout	
One stop shopping – fast	
Good selection	
Healthy food options	
Other:	

For the purposes of this survey, **"local food"** is defined as products that have been grown or produced in Berkshire County (such as fruit, vegetables, meat, eggs, dairy, jams, honey, bread, herbs, microbrews, maple syrup, etc.). *These items may or may not be certified organic.*

4. If you eat local food, where do you most often buy it? Please choose UP TO 3.

	Check up to **3**
I don't specifically eat local food	
Farmers Market (please specify location): ….....	
Farm Stores/Stands	
Pick-your-own	
Food co-ops such as Wild Oats Market	
Supermarkets	

Garden (Mine, family, friend)	
Other:	

5. When you shop, do you ever look to see where the food is from?

	Check here
Never	
Rarely	
Sometimes	
Almost Always	

IF “NEVER,” CHECK FIRST BOX BELOW AND MOVE TO QUESTION 7

6. Name up to 3 of your REASONS for buying local food

	Check up to **three**

I don’t specifically buy local food	
It is fresher	
It is healthier	
My family likes it	
It is organically grown	
It supports local farms and farmers	
It is good for the environment	
I know how and where it was grown	
It is less expensive	
OTHER:	

7. Would you buy more local food if you could? Yes No

8. Name up to 3 reasons that prevent you from buying (“ANY” or “MORE”) local food?

	Check **3**
It is too expensive	
It is difficult to get to the places that sell it	
My family won’t eat it	
The places that sell it do not accept my preferred form of payment	
It is not convenient to prepare	
It is low quality	
There is a lack of variety	
It is not readily available where I shop	
I do not know where to get it	
OTHER:	

9. IF LOCAL FOOD BUYER: What are some of your favorite local food items?

……

10. Are there OTHER food items would you like to have grown locally?

……

11. On average, how many times a week does your family buy food from each of the following locations? In your answer, please include all meals (i.e. breakfast, lunch, dinner) at all times of the day.

	Fast food chains such as McDonalds	Chain restaurants such as AppleBee's	Local restaurants
Never			
Less than once a week			
Once a week			
2–5 times a week			
6–10 times a week			
Greater than 10 times a week			

12. Is it important to you that the restaurants you eat at serve locally grown food?

	Check one
Not important	
Not very	

Somewhat	
Yes important	

13. On average, how much does your household spend on all kinds of food for the home each week, not including food from restaurants? Your best guess:

	Check one
Less than $50 per week	
$50-100	
$101–150	
$151–200	
$201–$250	
$251–$300	
More than $300 per week	

We have just a few more questions about you—such as your age and education etc. It would be helpful to us if you answered them but you do not have to. As I said, all this information is anonymous and confidential.

14. How many people, including yourself, currently live in your household?

(**Enter number**.)

____ Adults

____ Children under age 18

15. What is your level of schooling/education?

	Check here
Some High School	
High School graduate	
G.E.D.	
Two-year college	
Four-year college	
Graduate degree	

16. If you don't mind, it would be helpful to know about your household income?

____ Less than $24,999

____ $25,000–$49,999

____ $50,000–$74,999

____ $75,000–$99,999

____ More than $100,000

17. Gender:

____ Male

____ Female

18. Your age range?

Up to 19 ____ 20-29 ____ 30-39 ____ 40-49 ____ 50-59 ____ 60-69 ____ 70+ ____

19. Are there any further comments that you would like to make about local food or this survey?

…………………………………………………………………………………………

…………………………………………………………………………………………

…...

…...

Thank you SO VERY MUCH for taking the time and effort to talk with us. The results will contribute to planning for effective food systems for Northern Berkshire County residents in the future.

Thank you again.

_ _

SUSTAINABLE BERKSHIRES
Community Strategies For A Sustainable Future

If you are interested in learning more about Feed the Berkshires or participating in the project please visit our Sustainable Berkshires Website: http://sustainableberkshires.org/

Appendix B: Retailer Interview Guide

Food Retailer Survey

Name of retailer:

Type of retailer:

Hours of operation:

Name of person interviewed:

In what areas do you sell your products? *(Please check all that apply)*

___ Locally ___ Regionally ___ Statewide ___ Nationally

What influences your decisions when purchasing the products that you sell? *(Please check all that apply)*

___ Convenience

___ Price

___ Freshness

___ Quality

___ Where the product is from

___ Customer's preferences

___ Religious restrictions

___ How the product is grown

___ Contractual Restrictions

___ Other *(Please explain)*

How does your company define locally grown or produced products?

What percentage of your sales are locally grown or produced products? *(If you know these percentages for categories of foods such as meats, dairy, produce, ect please list those)*

Are there any barriers to your purchase of local products?

Are there barriers to your sale of local products?

Paint me a picture of your typical customer – what are they demanding (conventional, organic, local)?

Describe your relationship(s), if any, with local food producers. Do they approach you or do you approach them?

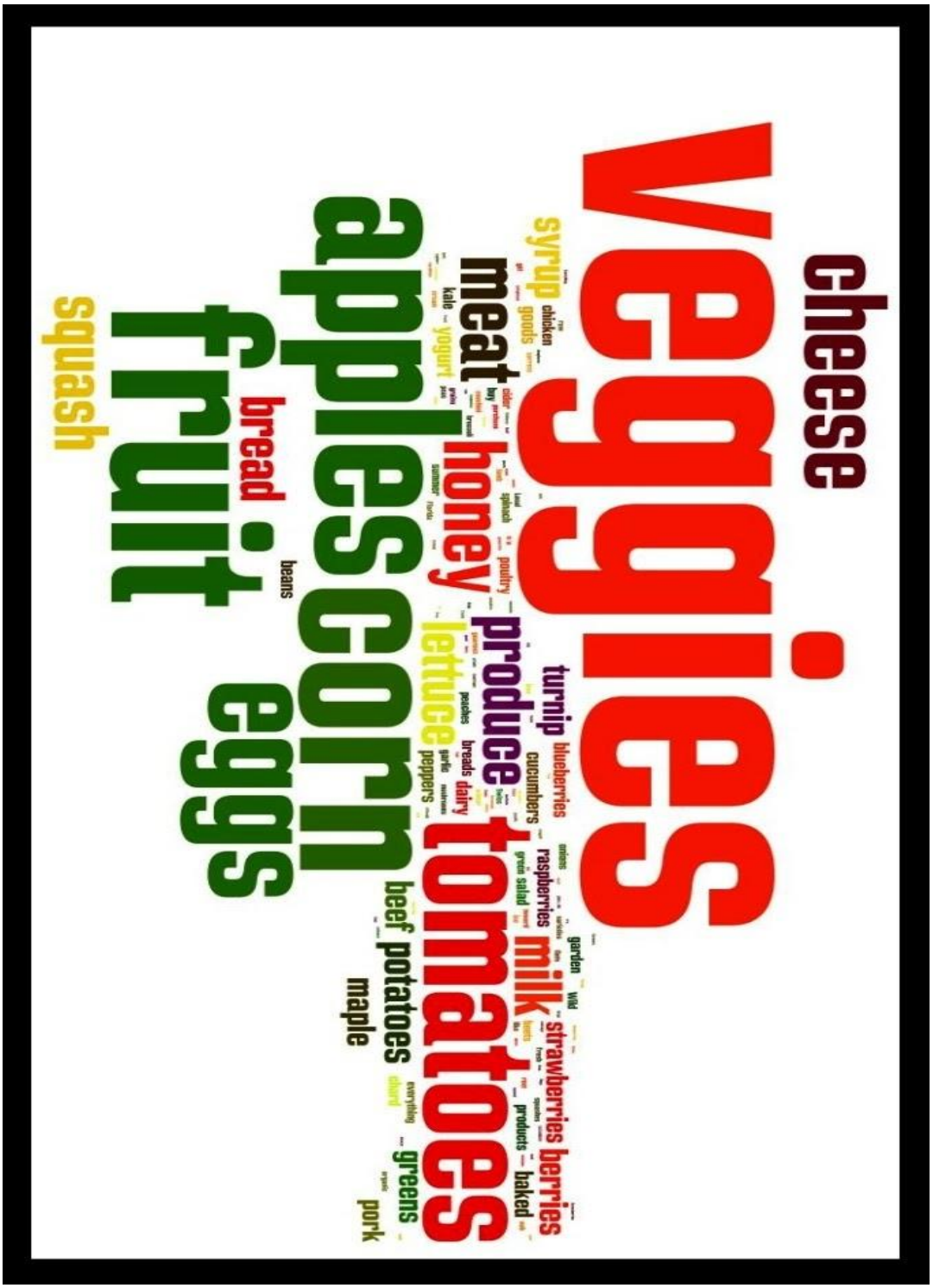
Have you ever refused a local producer's products? If so, why?

Is there demand for any locally grown or produced products which cannot be met by current local supply?

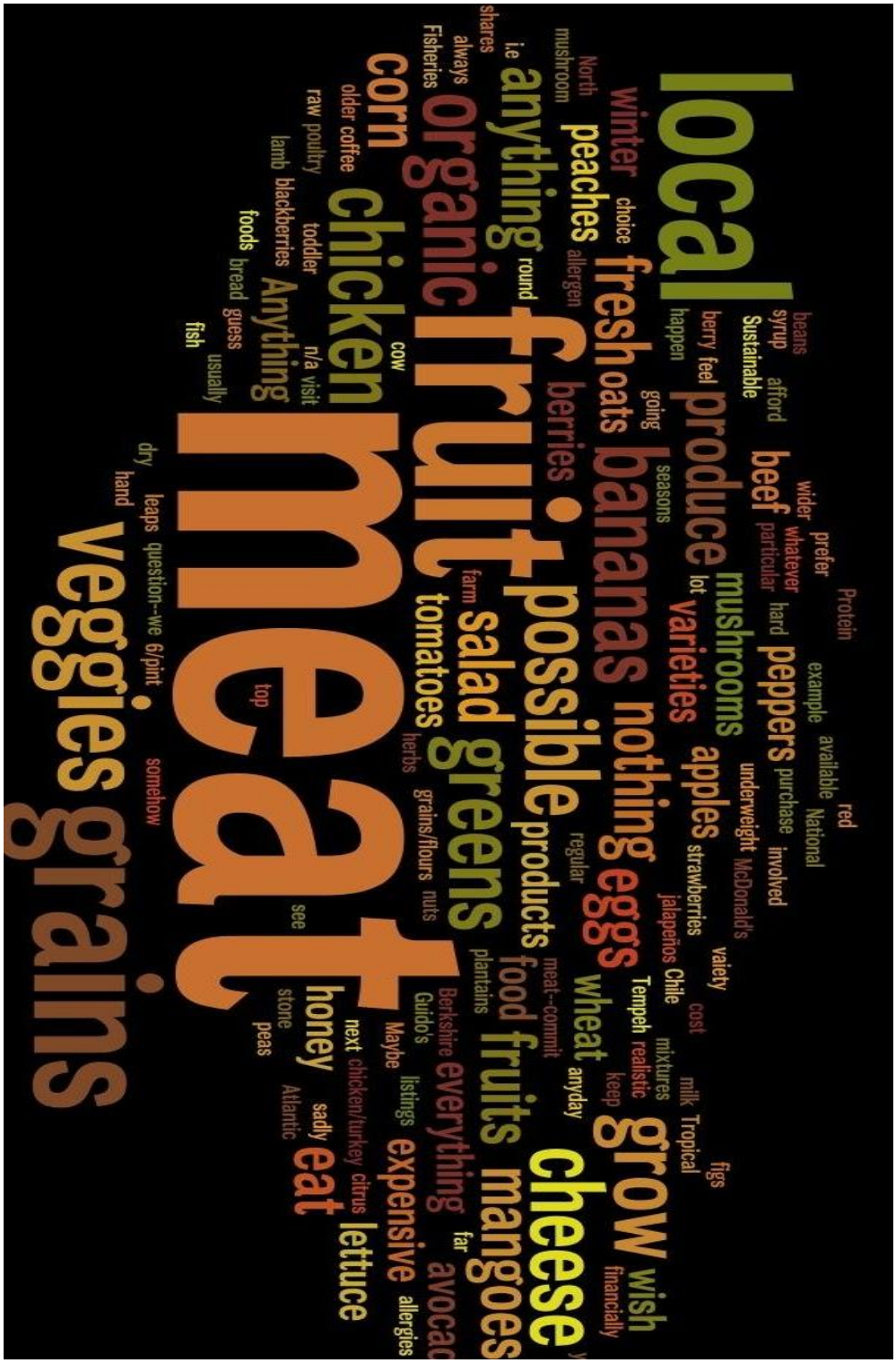
How can the Berkshire Regional Planning Commission, through its sustainability plan, make it more feasible for your company to sell more locally grown/produced products?

What changes, if any, could be made to the food system in general to promote local food?

Appendix C: Word frequency map of favorite local foods in Northern Berkshire County



Appendix D: Word frequency map of desired foods in Northern Berkshire County



Appendix E: Law and Policy

There are multiple levels of law and policies which impact the production, processing, and sales of local foods. Federal, state, and town regulations will be explored more in depth by the Farm Economics team, but our team has done a preliminary assessment that suggests some focal points for their research. The individual policies of food retailers, especially large grocery chains, are an essential part of the food distribution system that we were able to touch on in our interviews with retail managers, as well as ascertain on the retailers' websites.

The farm bill is often the first major legislation that comes to mind when we think of how federal policies impact agriculture. The first "farm bill" was the Agricultural Adjustment Act of 1933. The AAA was intended to increase agricultural incomes through the reduction in supply of agricultural products. The current farm bill has multiple (sometimes conflicting) objectives: support of farm incomes and viability, nutrition, environmental conservation, preservation of farmland, insurance programs, and energy among others. The farm bill influences food systems at all scales both directly and indirectly. Understanding how the bill is impacting Berkshire farms is critical to forming a plan within that framework to better promote local agriculture in the future.

Major subsidy programs largely do not support Berkshire farms but their indirect impacts are found throughout the food system. Less than 10,000 dollars supported Berkshire farmers in the region's top five subsidy programs between 1995 and 2010, out of a national farm subsidy budget of over 261.9 billion dollars for the same period (Environmental Working Group data, 2010). Of these subsidy programs, approximately 64% were commodity subsidies primarily directed towards corn, wheat, and soybeans. The farm bill and its commodity subsidies are often

blamed for the ubiquity of inexpensive, highly processed foods in the American diet. Between 1995 and 2010 approximately 10% of farmers collected over 62% of all farm subsidies– these are some of the largest farms in the United States (Environmental Working Group data, 2010). The decline in number of farms and increasing "industrialization" of the few that remain are trends often linked to these farm bill policies.

Despite its more controversial aspects, the most recent farm bill has numerous programs that seem supportive of small-scale diversified agricultural production. The Local Farmers Market Promotion Program, Local Food Enterprise Loan Program, Rural Micro-Entrepreneur Assistance program, Value-Added Agricultural Product Marketing Development Grants, and numerous beginning farmer assistance programs are potential resources that might be taken advantage of by local far mers (New Englans Sustainable Agriculture Working Group Conference, Albany NY, 2011). Further investigation into these programs and others will be essential to navigate the obstacles and opportunities that the farm bill presents to the Berkshire region.

Farmland preservation and environmental protection programs are included in the farm bill and in state policies. The Massachusetts Agricultural Preservation Restriction program (APR) pays farmers the difference between their lands agricultural and development value in order to preserve prime agricultural land (APR, Massachusetts Dept of Agricultural Resources, 2011). In Williamstown alone, Green River Farm, the Galousha farm, and parts of Cricket Creek farm are APR lands, and there may be many more. Given the decline of farming in the Berkshires, such measures are good for the preservation of land for farming, but they often do little to help farmers with economic viability issues (Galousha, personal communications spring 2011). Other incentive programs for sustainable farming practices and environmental

protections could also provide opportunities for Berkshire Farmers to further their environmental and economic sustainability.

Federal regulations regarding food health and safety also impact farmers and the sale of their products. The US Food and Drug Administration is responsible for much of this legislation. All slaughterhouses producing meat for interstate commerce are subjected to rigorous federal inspections of facilities, procedures, and animals both pre- and post-mortem (Slaughter Inspection 101, USDA/FSIS, 2010). Slaughterhouses can apply for state or federal inspection. State inspected facilities are held to equal or more stringent standards than are set by the FDA and those facilities receiving state inspections can only produce meat for intrastate commerce (State Inspection Programs, USDA/FSIS, 2011). These extensive regulatory policies presumably have limited the number of approved slaughterhouses in the northeast. For the Northern Berkshires, this means a six month waiting period for sending animals to the nearest approved slaughterhouse in New York. Farmers in the Berkshires need to reserve spots on the waiting list for animals they don't yet own in order to guarantee timely slaughter for meat sales (Hank Art, personal communications 2011). Other federal legislation regarding regulations for the safety and handling of produce is currently being developed by the FDA for its Food Safety Modernization Act, signed into law by President Obama last January. The new legislation will be "an enforceable regulation", unlike the former "Good Agricultural Practices" guidelines issued by the USDA (Safer Fruits and Vegetables, FDA; 2011). It is unclear how this developing piece of legislation will affect Berkshire farmers in the future, but clearly it will be an important topic to follow for Berkshire produce growers.

State regulations require pasteurization of dairy products sold off farm premises. While raw milk can carry disease causing pathogens, it is argued that much of this risk is alleviated in

small-scale grass-fed dairy operations where pathogen prevalence is low. Raw milk often has a much higher retail price than pasteurized milk (nearly all of which goes straight to the farmer) and has the potential to contribute to the preservation of local dairies (NOFA/Mass Raw Milk Network, 2011).

Finally, individual town policies related to farming, business/retail, health and safety standards, and zoning laws can have a huge impact on local farm viability. Our student team looked briefly into zoning law and board of health regulations specific to Williamstown. Though Williamstown zoning laws appear relatively friendly towards farming as a practice, they are not as encouraging of farming as a business venture. Zoning laws limit the storage of farming equipment, construction of farm buildings, farmstands, and retail of local crafts/foods. According to article 7.2 D, farmstands are not allowed within 25 feet of a road, grazing and any farm buildings must be separated from other districts by a minimum of 100ft, and farming equipment must be stored in an enclosed building (which also must be in accordance with zoning laws) or not visible from other zoning districts (Town of Williamstown Zoning Bylaws, 2008). Both indoor and outdoor retail of any sort is prohibited in rural districts. These limitations and others restrict farm economic viability. We found evidence of these limitations at a Williamstown Planning Board meeting in October, when a local farm proposed amending the zoning laws to allow them to host weddings and small concerts commercially within their farm store buildings. One board member opposing their proposal warned against the "slippery slope" from farming to business district, which was illustrative of the differing attitudes towards farming as a practice vs. farming as a business (Planning Board Meeting, Oct. 2011). Farming must be acknowledged as both a practice and as a business; there can be no difference if we are to help make farming economically viable. A brief telephone interview with Jeff Kennedy, the

inspector for the Williamstown Board of Health, indicated that town health and safety regulations do not differ from state and federal policies. Raw milk and local meat are sold in the town according to state and federal health regulations (no additional restrictions apply) (Jeff Kennedy, personal communications 2011). Williamstown is a "right to farm" community. By law, residents have a right to "cultivate the soil", "dairying", "forestry", and "raising of livestock" for commercial agriculture (Right to Farm Williamstown Bylaw Chapter 46, 2006). A more in depth review of each town's policies including interviews with farmers, town agricultural commissions, planning/zoning boards, and the conservation commission will provide a clearer picture of how town policies are impacting local farms and how they might be changed to benefit local farms without decreasing community welfare.