



REGIONAL FOOD INFRASTRUCTURE NETWORK (RFIN)

**Executive Report on Feasibility Study
March 18, 2008**

Prepared by:



For More Information, Please Contact

**The Pennsylvania Association for Sustainable Agriculture
650 Smithfield Street
Suite 1160
Pittsburgh, Pennsylvania 15222
Phone: 412-697-0411**

TABLE OF CONTENTS

I. PROJECT INTRODUCTION AND EXECUTIVE SUMMARY	2
II. RESEARCH METHODOLOGY.....	11
III. SUPPLY ANALYSIS.....	14
IV. DEMAND ANALYSIS.....	16
V. NETWORK ANALYSIS AND KEY CONCEPTS.....	21

APPENDICES (SEPARATE DOCUMENTS):

APPENDIX A: STRUCTURAL ANALYSIS REPORT

APPENDIX B: FARMER SURVEY REPORT AND SURVEY INSTRUMENT

APPENDIX C: AGRIBUSINESS LEADER INTERVIEW SUMMARY AND SCRIPT

APPENDIX D: CONSUMER SURVEY REPORT AND SURVEY INSTRUMENT

APPENDIX E: PASA PLANNING RETREAT SUMMARY

APPENDIX F: REGIONAL STAKEHOLDER FOCUS GROUP COMMENTS & TOPIC GUIDE

APPENDIX G: RFIN NEWSLETTERS

APPENDIX H: RFIN RETAIL BUSINESS MODEL PRO FORMA ANALYSIS

I. PROJECT INTRODUCTION AND EXECUTIVE SUMMARY

Project Introduction

On January 19, 2006, The Pennsylvania Association for Sustainable Agriculture (PASA), Tripp Umbach, and Image Earth began a comprehensive market assessment and strategic planning study for sustainable, local agriculture in Western Pennsylvania. The study covered nineteen counties in Western Pennsylvania and was funded through Pennsylvania's First Industries Fund Grant program. Figure 1.1 below illustrates the geographic study area next to Table 1.1 which provides some key demographic statistics for the study area.

Figure 1.1: PASA Study Area

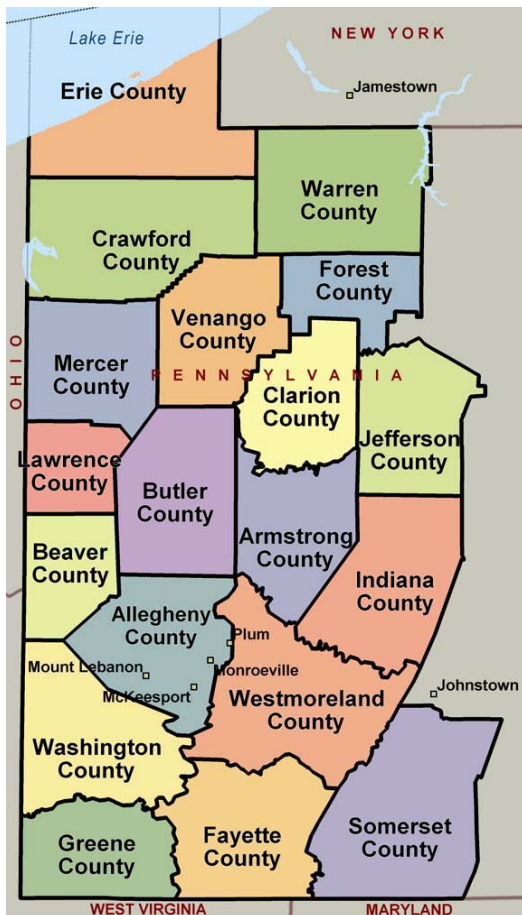


Table 1.1: Demographics

19-County Study Area	
Population	3,401,389
Area (sq. miles)	13,851
Employment	1,874,685
Households	1,534,366
Income Per Household	\$67,894

* Source: Census 2000

The project kickoff meeting held on January 19, 2006 was the first of four planning meetings with the Regional Food Infrastructure Network (RFIN) Steering Committee whose role is to help guide the research and planning efforts for this study. The RFIN Steering Committee is comprised of local farmers, economic development leaders, business and agribusiness leaders, PASA representatives, and other community stakeholders who have an interest in promoting local agriculture and local food products. The goal of the RFIN is to develop a business plan that links farms, businesses, and consumers in the production, processing, distribution, marketing, and purchasing of local food products in the Western Pennsylvania region. While this plan does not go into detail on each solution, it comprehensively presents many facets of our regional food system. Specifically, the RFIN study aimed to:

- ✓ Obtain baseline and technical information on regional agriculture.
- ✓ Engage local farmers throughout the region to expand the network and assist with planning efforts.
- ✓ Discern consumers' preferences and demand for locally raised produced foods.
- ✓ Determine the capacity and feasibility of a Regional Food Infrastructure Network.
- ✓ Develop a comprehensive, regional strategic plan within a 19-county region.
- ✓ Determine financial projections and develop economic impact analysis.
- ✓ Deliver a strategic Business Plan for selected infrastructure improvements

Beyond the scope of developing this business plan for the region, RFIN has the capacity to act as a catalyst for short-term and long-term implementation of the plan. Lead by PASA, RFIN is capable of being a network that can:

- ✓ Implement the RFIN business plans throughout the region in incremental stages
- ✓ Promote local agriculture and the RFIN business plan to consumers, local farmers, processors, distributors, and economic development leaders
- ✓ Help to develop local retail store outlets for local farmers
- ✓ Continue to expand and strengthen the RFIN by engaging new members and adding more resources
- ✓ Provide business planning assistance to local farmers
- ✓ Distribute pertinent information to regional stateholders about the benefits of local agriculture and the progress of the RFIN business plan

Project Summary

In January 2005, a discussion among PASA members evolved into a plan to address the problems facing agriculture in Western Pennsylvania. The plan was to assess the feasibility of producing value-added food products from local farms and selling those products to consumers in local markets.

At the same time, the Rendell Administration announced the initiation of the First Industries program, a \$150 million grant and loan program aimed at strengthening Pennsylvania's agriculture and tourism industries. In July 2005, PASA submitted to the Pennsylvania Department of Community Economic Development a grant for \$175,000. The grant for the Regional Food Infrastructure Network (RFIN) study was awarded in September 2005.

The overriding goal for the RFIN study was to determine the feasibility of producing value-added food products from local farms and selling those products to consumers in local markets. This plan collected a comprehensive baseline of information that determined the following: total dollar value of existing consumer demand for food in the 19 counties region; the dollar value of existing food supply produced in the region; where the food processors

were located; where farmers in the region were located who were interested in selling directly to consumers; and what local farm products consumers prefer to purchase.

The project was conducted in three phases. The first phase assessed agricultural production and economic impact in the region. The second phase focused on consumers' food purchasing power and preferences. The final phase identified opportunities and challenges for Western Pennsylvania agriculture. These phases resulted in the following reports: Western Pennsylvania Agriculture Structure Analysis, Regional Assets Assessment, Barriers and Unmet Needs Assessment, Workforce Assessment and Consumer Market Research.

The reports created were the

Below, are some significant highlights from these reports.

The Region's Farm Families

The region's farmers produce \$656 million per year¹, yet spend \$672 million² to produce food, losing \$16 million in production costs each year. This is a total loss of \$80 million over the last five years. This loss is offset by an average of \$24 million of federal subsidies³, and \$58 million of farm-related income⁴, each year.

The region includes:

- 17,648 farms with an average farm size of 137 acres⁵
- 89 farms (28% of state) sell \$349,000 of organic products, 4% of Pennsylvania's production
- 1,973 farms sell \$13 million of food directly to consumers (1.2% decrease from 1997 to 2002)

The Region's Consumers

The region's consumers spend \$7.9 billion buying food each year⁶. Of the \$7.9 billion spent on food, only \$13.6 million was spent purchasing directly from farmers. The following bullets provide a breakout of dollars spent.

Foods purchased for at-home consumption:

- | | |
|-------------------------------------|---------------|
| • Meats, poultry, fish and eggs | \$1.2 billion |
| • Fruits and Vegetables | \$841 million |
| • Cereals and bakery products | \$723 million |
| • Dairy products | \$529 million |
| • "Other" incl. sweets, fats & oils | \$1.3 billion |
| • Foods purchased away from home | \$3.3 billion |

¹ Average taken over the years 2000 to 2004, from Cash Receipts from Marketing data from the Bureau of Economic Analysis, <http://www.bea.gov/region/reis/>.

² Average taken over the years 2000 to 2004, from the Total Production Expenses data from the Bureau of Economic Analysis, <http://www.bea.gov/region/reis/>.

³ Average taken over the years 2000 to 2004, from the Government Payments data from the Bureau of Economic Analysis, <http://www.bea.gov/region/reis/>.

⁴ Average taken over the years 2000 to 2004, from the Imputed and Miscellaneous income received data from the Bureau of Economic Analysis, <http://www.bea.gov/region/reis/>. This includes imputed income such as value of home consumption, and other farm related income components such as machine hire and custom work income, rental income and income from forest products.

⁵ All of the following data is calculated from county data from the 2002 US Census of Agricultural

⁶ This number is calculated using the Average Annual Food Expenditures per Consumer Unit (2.4 people on average per unit) from the Bureau of Labor Statistics, 1999-2000 Northeast Region Consumer Expenditure Survey multiplied by the number of households (2.48 people on average per household) in Western PA from the US Census 2000

Farm and Food Economy Summary

Farmers lose \$16 million each year producing food commodities, while consumers spend \$5.9 billion buying food from outside the region. Of the \$672 million in agricultural production costs, about 10% is on hired labor. It is assumed that a large percentage of the remaining \$600 million in costs (ie. Fertilizer, seeds, feed, livestock, petroleum products and other expenses) is spent on goods from outside the region.

Consumer Preferences and Perspectives on Local Food Products⁷

The study results were very clear about consumer preferences and perspectives on local food products. The bullet points below summarize these preferences and perspectives.

- The top three qualities consumers look for in food products include **safety, freshness** and **taste**.
- **61%** of consumers intentionally seek out local food products.
- Of those consumers who seek out local food products:

93% have purchased local vegetables	38% have purchased local beef
90% have purchased local fruit	30% have purchased local cheese
- The top three reasons consumer buy local food products are its **fresher, supports the local economy, and tastes better**.
- For those consumers that don't seek out local food products, the top three reasons for not buying locally are **access/availability, labeling/advertising, and convenience/location**.
- If available consumers:

98% would buy local fruit	84% would buy local chicken
98% would buy local vegetables	82% would buy local beef
87% would buy local cheese	79% would buy local pork

⁷ From PASA's Regional Food Infrastructure Network 2006 Consumer Survey.

- Consumers have a higher demand for local meat (beef and pork) and dairy products in rural communities and higher demand for local fruits and vegetables in urban communities.
- Consumers have a higher demand for local products versus organic products.
- There is a demand for local value-added products such as jams, syrups and salsas.
- Only 17% of consumers have concerns about buying local products, the greatest of which is safety/health/pesticides/preparation.
- **69%** consider “local” to be within **100 miles or less** of the point of purchase.

Marketing Local Products to Regional Consumers⁸

Consumer behavior throughout the region is clear. Below are a few bullet points summarizing consumer preferences for the marketing of local food products.

- Consumers most often shop at and would be most interested in buying locally grown food from **regular grocery stores and farmers’ markets**.
- Consumers get most of their information about food products from **in-store signs and newspapers**.
- **57%** of consumers would pay **5-10% more** for locally grown or produced food
- **81%** would be likely to buy a product with the ***Buy Fresh, Buy Local***[®] label on it versus a commercial/nationally branded product.

⁸ From PASA’s Regional Food Infrastructure Network 2006 Consumer Survey.

Project Key Concepts

During the study, a number of key concepts emerged through the process that guided the development of the business plan. These key concepts are outlined below.

1. Education & Marketing:

Marketing assistance, such as business planning, advertising and promotion, branding, and pricing, is critical to the success of small family farmers in Western Pennsylvania.

Marketing assistance should include:

- Consumer Education on Local Foods
- Regional Marketing and Promotion through *Buy Fresh Buy Local*®
- Develop new direct marketing ideas

2. Sales Channels:

Consumers shop most often at supermarkets and grocery stores and prefer to buy local foods there and from farmers markets. In the minds of consumers, these markets have provided quality foods that are convenient and accessible.

Farmers concur. They are interested in selling at existing retail outlets such as regular grocery stores, supermarkets, and farmers markets, and, using the ***Buy Fresh Buy Local***® label as the primary marketing and sales tool.

3. Distribution Networks:

Distribution networks are critical infrastructure underpinnings to successful local food systems. Concepts such as marketing, taking orders, collecting, storing, and delivering perishable foods among partnering farms makes for complicated logistics. The reason for its absence in the region, apart from Paragon Monteverde, is the difficulty associated with economies of scale for organized collection, cooling and re-distribution. Distribution is a critical component and necessary service if a local food system is to be viable, profitable, and enduring.

4. Partnerships Among Local Farmers:

Farmer Survey results were mildly in favor of farmers working together to develop value-added products, or, to produce regionally branded products. Sixty-six percent expressed interest in participating in a group that produces and sells a regionally branded product and 58% said they would like to produce a value-added product (such as ice cream, cheese, frozen foods).

5. Workforce Assessment:

The overall farm labor shortage is a pressing challenge for farms small and large. The seasonal work, demanding labor, lack of access to legal migrant labor, unskilled local labor, low wages, and inability to provide healthcare benefits are obstacles for finding and retaining an agricultural workforce. Farming has largely relied heavily on the nuclear farm family to supply labor. That future is uncertain too. Forty-six percent of farmers surveyed said their children are currently involved with the farm business; 20% say their children will take over the family farm when they retire; 35% are unsure and 45% say their children will *not* be taking over the farm.

6. Agritourism:

Agricultural tourism is a common thread throughout this study. The majority of participants mentioned the strides being made in agritourism nationally and locally and recommended agritourism as a secondary revenue stream to help sustain family farms in Western Pennsylvania.

7. Network Communications:

Newsletters proved to be an effective way of connecting all the interested collaborators in the project. During the RFIN project analysis, Image Earth wrote eleven topical newsletters that explored the success stories of farmers and food entrepreneurs, and covered obstacles and solutions to issues that need to be addressed in order to develop a regional food system.

II. RESEARCH METHODOLOGY

A comprehensive methodology was used to conduct this study that involved thorough analysis of both qualitative and quantitative data from a wide variety of sources throughout the 19-county region. The following work was performed over an 18-month period from January of 2006 through June of 2007.

1. **RFIN Steering Committee Meetings and Planning Retreat:** The research team facilitated 3 RFIN steering committee meetings. The purpose of these meetings was to present the results of the qualitative and quantitative research, gather feedback, and solicit ideas for actionable goals and next steps. The fourth RFIN Steering Committee meeting was a full-day planning retreat. Participants in the planning retreat were asked to provide feedback related to regional resources and barriers, marketing strategies, and opportunities for strategic partnerships.
2. **Secondary Data Analysis:** Tripp Umbach collected regional agriculture census data to create a baseline profile of the study area. Data from the Structural Analysis report was reported in aggregate across the entire 19-county region, as 3 smaller sub regions (North, Central, and South) and as 19 individual county profiles. Tripp Umbach also conducted national best practice research to identify trends in agriculture on a national level which, if implemented, may provide more stability to local farms in Western Pennsylvania.
3. **Economic Impact Analysis:** As part of the Structural Analysis Report, IMPLAN data was used to quantify the business volume, government tax revenue, and employment impacts of agriculture within the study area.
4. **Farmer Survey:** A comprehensive list of farmers throughout the study area was compiled using lists purchased from Dunn and Bradstreet, the Pennsylvania Vegetable Growers Association, and PASA. In total, 3,297 surveys were mailed to farmers in 19 counties to better understand local farmers' needs and plans for the

future of their farms. Tripp Umbach analyzed 313 returned surveys for reporting purposes for a 9.7% response rate. According to agricultural census data there are 20,348 total farms in the 19-county region. Of the total number of farms in this region, approximately 10,142 are oriented towards the production of food-related commodities. The sample of 313 surveys collected is significant at the 95% confidence interval with a margin of error of +/- 4.4%.

5. **Agribusiness Leader Interviews:** Twenty one-hour long interviews were conducted with agribusiness leaders throughout the region. They included local farmers, state representatives from the PA Department of Agriculture, economic development agencies, local chefs, USDA representatives, local food retailers and restaurants, Penn State Cooperative Extension, and local conservation districts. The goal of the interviews was to qualitatively assess the strengths, weaknesses, opportunities, and threats present for Western PA agriculture.

6. **Consumer Survey:** 10,000 surveys were mailed to random households throughout the 19-county study area. The survey was designed to measure consumers' demands and preferences for local food products. The survey measured price points, tested marketing labels and strategies, examined consumer shopping behavior, and explored reasons for purchasing local food products. Tripp Umbach collected 644 surveys for analysis for a 7.4% response rate. The sample is significant with a margin of error of +/- 3.86%. Data from the Consumer Survey was reported in aggregate across the entire 19-county region, as well as 3 smaller sub regions including the North, Central, and South. The sub-region county groupings are listed below.
 - ✓ **North Region:** Erie, Warren, Crawford, Forest, Venango, Mercer, Clarion, Jefferson, Lawrence

 - ✓ **Central Region:** Allegheny, Beaver, Armstrong, Indiana, Butler

 - ✓ **South Region:** Greene, Fayette, Somerset, Washington, Westmoreland

7. **Focus Groups:** Seven regional stakeholder meetings were held throughout the 19-county region with local farmers and food processors. Focus groups were conducted in Washington and Fayette Counties in the South Region, Allegheny and Butler Counties in the Central Region, and Erie, Mercer, and Crawford Counties in the North Region. Farmers who completed a farmer survey and stated an interest in becoming part of the RFIN were invited to participate in the focus groups. Food processors were invited to talk about strategies for marketing and distributing local food products. The focus groups were designed with the intent to have farmers and processors in individual groups, such as livestock farmers sitting with meat and dairy processors, in an effort to develop networking and strategic partnerships.

8. **Mapping:** The project team compiled a list and maps of local farmers and food processors who expressed interest in being part of the RFIN. These organizations were broken out by food product type and county and were inputted into a Microsoft Excel Worksheet. The locational data was downloaded into Microsoft MapPoint 200, from which maps were created to identify spatial relationships and strategic locations for value-added processing facilities, product distribution, and/or retail sales channels.

III. SUPPLY ANALYSIS

To determine the total capacity of farmers and food related commodities within the region, Tripp Umbach and PASA compiled primary survey data from farmers and secondary data from the agricultural census. The total number of farms in the region and the percentage of farmers from the farmer survey who expressed interest in being part of the RFIN were used to project the potential total capacity by value of commodity sold by the RFIN.

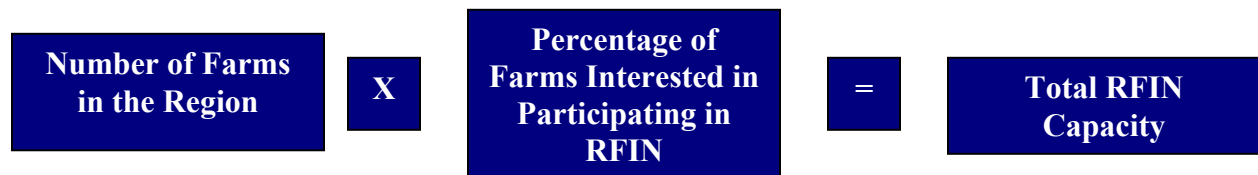


Table 3.1 below illustrates that there are 10,142 total farms within the 19-county region which raise or grow food related commodities. Dairy cattle and beef cattle farms make up 79% of the total number of farms within the region.

Table 3.1: Total Number of Farms by NAIC Code

Farm Type	Quantity	%
Dairy cattle and milk production (11212)	4,491	44%
Beef cattle ranching and farming (112111)	3,490	35%
Fruit and tree nut farming (1113)	566	6%
Vegetable and melon farming (1112)	525	5%
Sheep and goat farming (1124)	505	5%
Hog and pig farming (1122)	342	3%
Poultry and egg production (1123)	223	2%
Region Total	10,142	100%

Source: 2002 Census of Agriculture

Table 3.2 illustrates the total value of sales by commodity group from food related commodities. Overall, local farms sell \$315 million worth of food commodities throughout the 19-county region. The value of sales by commodity group is proportionate to the number of farms by North American Industrial Classification. Approximately 80% of the value of sales within the region is attributable to dairy and beef farms.

Table 3.2: Value of Sales by Commodity Group (\$1,000)

Commodity Group	\$	%
Milk and other dairy products from cows	193,651	61%
Cattle and calves	60,438	19%
Vegetables, melons, potatoes, and sweet potatoes	27,254	9%
Fruits, tree nuts, and berries	24,342	7%
Hogs and pigs	4,984	2%
Sheep, goats, and their products	2,357	1%
Poultry and eggs	2,022	1%
Region Total	\$315,048	100%

Source: 2002 Census of Agriculture

A total of 135 farmers (43%) who responded to the farmer survey stated they are interested in becoming a part of the RFIN business plan. Because a statistically valid sample of surveys from farms within the region was collected, inferential statistical analysis may be used to project the total number of farms within the region who would be interested in participating in a collaborative business plan to increase the sale of local food commodities within the local region.

Using the baseline percentage of 43%, the total capacity of RFIN for the region is approximately 4,361 farms accounting for roughly \$135.5 million worth of sales by commodity group. Breaking this down even further, table 3.3 below estimates the total supply by value of sales by commodity group by product type. Tripp Umbach and PASA have grouped all food products into 3 broad categories including dairy, produce, and meat.

Table 3.3: Regional Supply by Value of Sales (\$1,000)

Commodity Group	\$	%
Dairy	83,270	61%
Meat	30,014	22%
Produce	22,186	17%
Region Total	\$135,470	100%

Source: 2002 Census of Agriculture

IV. DEMAND ANALYSIS

The total demand for local food products within the local region is strong. To measure this demand, a consumer survey was mailed to households throughout the local region and, census data was used to determine the value of consumer demand within the local region.

Table 4.1 below illustrates the demographics for the local region. In total, the 19-county study area covers over 13,000 square miles and is home to 3.4 million people living in 1.5 million homes.

Figure 4.1: PASA Study Area

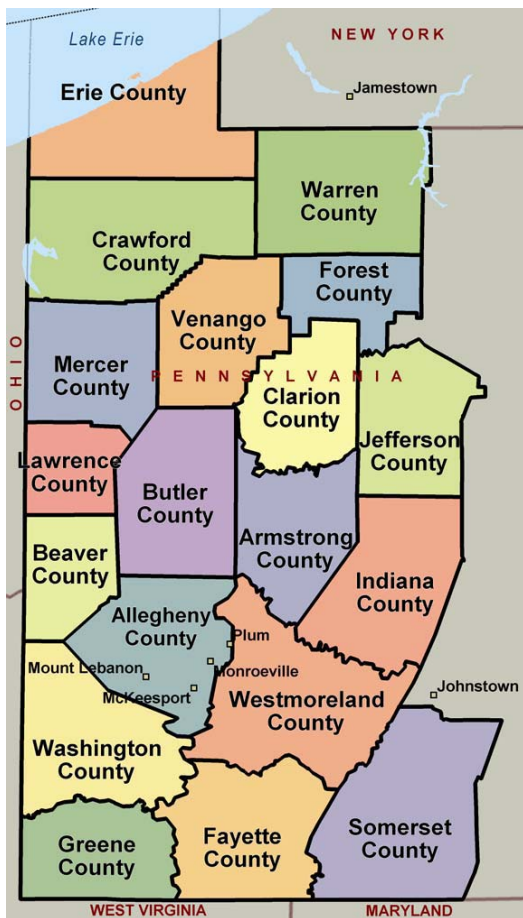


Table 4.1: Demographics

19-County Study Area	
Population	3,401,389
Area (sq. miles)	13,851
Employment	1,874,685
Households	1,534,366
Income Per Household	\$67,894

* Source: Census 2000

Almost two-thirds of the households surveyed (61%) stated they intentionally seek out locally-grown food. While only 61% of consumers intentionally seek out locally grown food, well over 90% of consumers have a history of purchasing local food products.

The history of purchasing local foods is promising. In the surveys however, consumers reported that the lack of access and availability, convenience and location, and labeling and marketing of local food products are obstacles to purchasing more local food.

Table 4.2 below shows the discrepancy between the percentages of consumers who reported having purchased a local food commodity in the past versus the percentage of consumers who would purchase locally grown food commodities if they were readily available. The food commodities are listed in rank order according to the highest percentage change.

Table 4.2: Consumers Who Have Purchased vs. Consumers Who Would Purchase

Food Category	Have Purchased in the Past	Would Purchase if Available	Percentage Change
Chicken	25%	84%	59%
Cheese	30%	87%	57%
Pork	28%	79%	51%
Beef	38%	82%	44%
Other	35%	78%	43%
Fruit	90%	98%	8%
Vegetables	93%	98%	5%

Source: 2006 Tripp Umbach Consumer Survey

The actual demand consumers have for purchasing local food commodities lies in their response to which foods do they prefer to buy locally grown. Figure 4.2 illustrates 59% of consumers (59% = the average of the eight food categories listed in figure 4.2) prefer to purchase locally grown food products over nationally branded food commodities.

Figure 4.2: Local Foods Consumers Prefer to Purchase

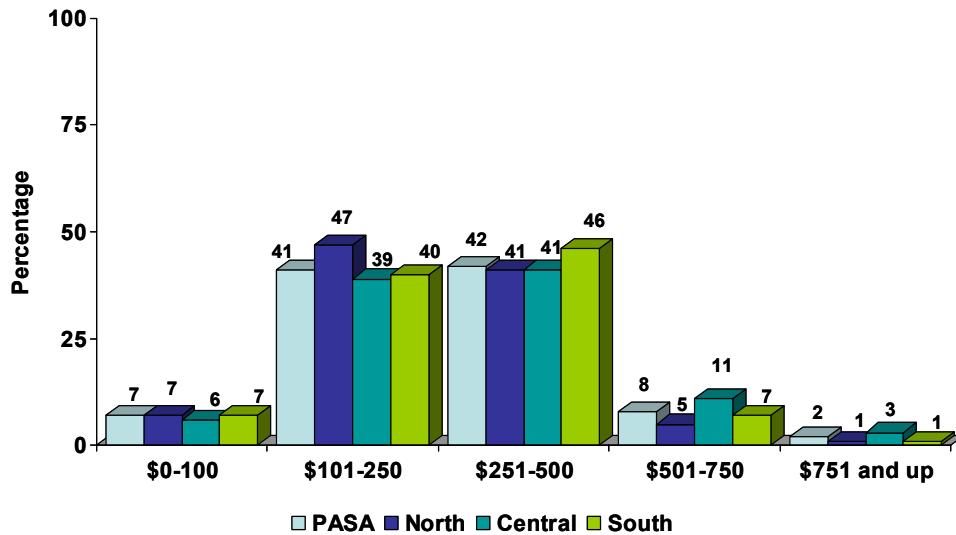
Which foods do you prefer to purchase **locally-grown**? (Check all that apply)



Given the average percentage of consumers who prefer to purchase locally grown food commodities is 59%, it's important to understand the total value of food commodities purchased on a monthly basis by households within the local region to determine the overall value of the demand consumers have for locally grown food commodities. Figure 4.3 below shows that 83% of households spend between \$101 and \$500 per month on food commodities.

Figure 4.3: Average Household Expenditure Per Month On Food

**Approximately how much do you spend on food each month?
(Please do not include restaurant spending.)**



The outliers in this data are the 7% of households which spend \$100 or less per month and the 10% of households which spend \$500 or more. By eliminating the outliers in the data,

we find the median household expenditure per month on food commodities to be approximately \$300 per month. With 1.5 million households in the local region, the total value of food commodities purchased each month within the local region is \$460.3 million. Given that 59% of consumer demand is driven toward local food commodities, the total demand for local food commodities is approximately \$271.6 million per month and \$3.3 billion per year. By comparison, the total supply of food commodities by value of sales within the local region from section III of this report is only \$315 million for all farms in the local region and \$135.5 million for local farms interested in the RFIN. Figure 4.4 below illustrates the calculation for total market demand.

Figure 4.4: Total Demand for Local Food Products



The project team also broke out the total demand for the region into four broader commodity-based categories including dairy, meat, produce, and grains/other. Tripp Umbach estimates that 50% of the overall demand resides in produce, 30% in meat, 15% in dairy, and 5% in grain and other. Table 4.3 below illustrates this demand.

Table 4.3: Regional Demand by Value of Sales (\$1,000)

Commodity Group	\$	%
Produce	\$1,629,496,692.00	50%
Meat	\$977,698,015.20	30%
Dairy	\$488,849,007.60	15%
Grains and Other	\$162,949,669.20	5%
Region Total	\$3,258,993,384	100%

Source: 2006 Tripp Umbach Consumer Survey and 2000 Census Data

Total demand for local food is estimated at \$271.6 million while production potential of farms interested in participating in a regional business plan is identified as \$135 million.

This leaves a gap of \$136.6 million between consumer demand and local production.

Further compounding this gap is the fact that only \$13.6 million in sales (2002 U.S. Agricultural Census) went to farms in 2002. This leaves a potential gap of \$258 million between consumer demand and local food production.

Identified in Section V Network Analysis and Key Concepts below are strategies for bridging this gap through education, infrastructure development, and the development of new sales channels.

V. NETWORK ANALYSIS AND KEY CONCEPTS

During the course of this study, a number of significant actionable concepts emerged from the feedback provided by agribusiness leaders, farmers, consumers, secondary data research, and steering committee members. The actionable items are ***equally weighted and not listed in rank order***. Summarized below as ‘Key Concepts’, they are as follows:

1. Education & Marketing
2. Sales Channels
3. Distribution Networks
4. Partnerships Among Local Farmers
5. Workforce Assessment
6. Agritourism
7. Network Communications

KEY CONCEPT 1

EDUCATION & MARKETING

Marketing assistance, such as business planning, advertising and promotion, branding, and pricing, is critical to the success of small family farmers in Western Pennsylvania. Farmers want help in these areas (Farmer Survey). Table 5.1 tabulates their responses for different types of marketing assistance.

Table 5.1: Marketing Assistance

Need Assistance	Percentage
Marketing Planning	41%
Business Planning	31%
Financial Planning	30%
Succession Planning	23%

Source: 2006 Tripp Umbach Farmer Survey; See Appendix B for detailed survey results

Three types of market assistance were expanded upon in the focus groups:

1. **Consumer Education on Local Foods:** Educational programs in schools (where food comes from, nutrition, farm tours, and local economies), brochures at checkout counters of food stores and farmers' markets, and regional ads about local foods were the top recommendations made by farmers.
2. **Regional Marketing and Promotion through Buy Fresh Buy Local:** Results from the Consumer Survey revealed that 92 % responded very favorably to the **Buy Fresh Buy Local®** label. After sharing this with farmers, most expressed interest in using the **Buy Fresh Buy Local®** label as a means of marketing and promoting their products.
3. **Develop new direct marketing ideas:** direct farm sales, agritourism, and year-round retail markets.

RECOMMENDATIONS:

1. Develop a **one-stop shop** for farmers and other agricultural professionals to quickly and easily identify all assistance resources that exist for Western Pennsylvania. This could be a web site that lists continuing education classes for farmers (record keeping, computer use, internet sales); free business plan consulting; funding for equipment, upgrades, agritourism improvements; conservation grants; succession planning; and mentoring programs.

Who: A collaborative effort lead by the Pennsylvania Department of Agriculture with PASA, Penn State Extension, Conservation Districts, community colleges, Keystone Development Center, Small Business Administration, private foundations, others.

2. The **Buy Fresh Buy Local® (BFBL) campaign** has a very strong visual appeal for consumers and offers an overarching branding campaign, meaning that different farms can each sell their individually branded items under the BFBL banner. This makes for an affordable, shared marketing campaign around local foods, and flourishes with the participation of many diverse farms. BFBL should be embraced

by farmers interested in direct and retail sales at regional and statewide scales, as well as, a marketing and consumer education campaign.

Who: PASA who has licensed the statewide use of BFBL. They need to continue BFBL promotion, even among non-PASA members.

3. **Consumer education** for K-12 school children and adult consumers needs to be thoughtfully implemented and constantly reinforced. The educational message could iterate what local consumers rank as their top priorities: food safety, freshness, taste, quality, nutrition, and supporting the local economy. Education can occur in school classrooms and cafeterias, field trips to local farms, and within retail stores. Eaters meeting farmers is a proven way to learn about local foods. And in-store marketing is the preferred media by consumers in Western PA.

Who: BFBL campaign could develop content and materials. In-school programming and policy shifts in local school districts could be led by energized individuals / organizations. In-school food purchases from local farmers.

KEY CONCEPT 2

SALES CHANNELS

Pennsylvania farmers lead the nation in direct farm sales. In the regional focus groups, however, farmers said they need help in identifying new market opportunities. In planning new or expanded market venues for farmers and the region's 3.4 million consumers, it is prudent to study consumer behavior and shopping patterns.

According to the results of the consumer survey, Access and Availability, are the leading factors in buying more local foods, or, buying them for the first time. Secondly, consumers equally consider Quality and Cost when buying food. Asked where they prefer to buy local food products, supermarkets and grocery stores topped the list.

Chart 5.1: Consumer Sales Channel Preference for Local Foods

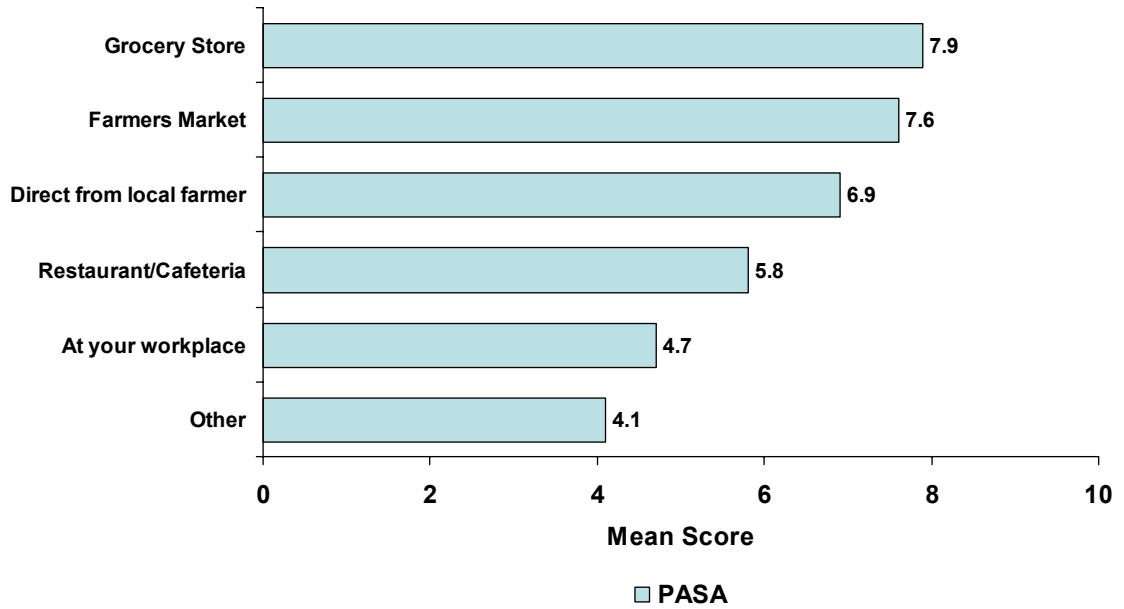
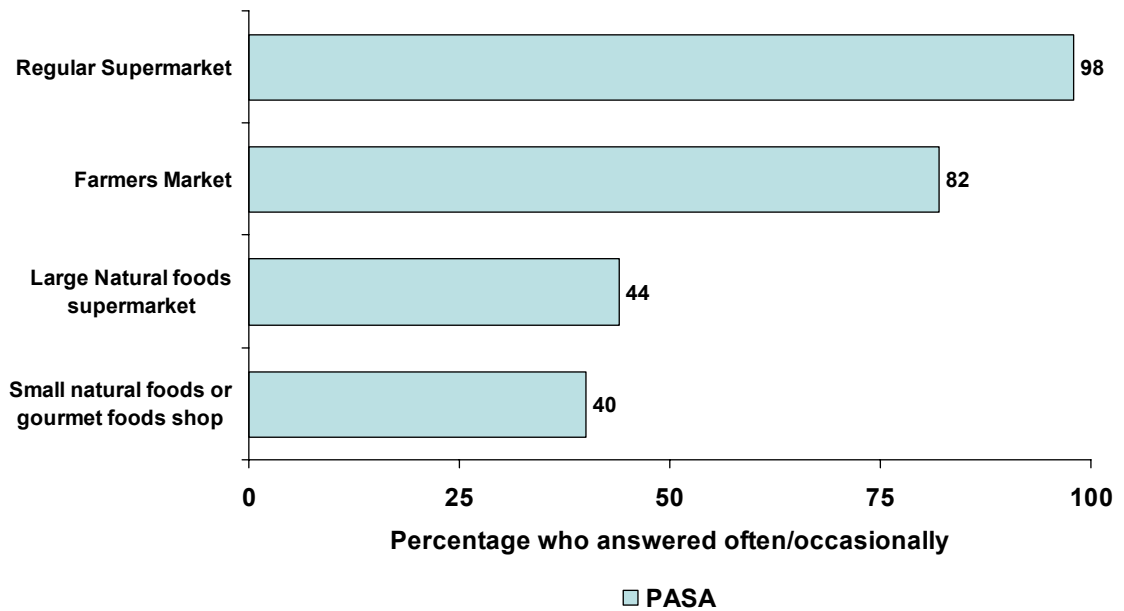


Chart 5.2: Percentage of Consumers who Often or Occasionally Shop at:



Charts 5.1 and 5.2: The Consumer Survey results are clear: consumers shop most often at supermarkets and grocery stores and secondly, from farmers markets. In the minds of consumers, these markets have provided quality foods that are convenient and accessible.

Farmers concur. They are interested in selling at existing retail outlets such as regular grocery stores, supermarkets, and farmers markets, and, using the **Buy Fresh Buy Local®** label as the primary marketing and sales tool. They noted that past attempts in grocery stores were

unsuccessful, but times are changing: independent grocery store managers see the demand for healthier foods and organic products that are locally produced. This trend is taking place in Giant Eagle's two Market District stores, Whole Foods, McGinnis Sisters (City of Pittsburgh and suburbs), Whole Foods Co-op (Erie, PA), and Meadville Market House (Meadville, PA).

Consumers ranked farmers' markets, second for places to purchase local foods—90% bought local fruits and vegetables through these two venues. Farmers' markets are becoming more prevalent in towns and neighborhoods in Western Pennsylvania; however their seasonality and focus on fresh fruits and vegetables, limit consumers' options and the purchasing power that would benefit farmers.

Drawbacks to farmers' markets include limited hours of operation, a six-month season, variable weather conditions, and a lack of local meat and dairy products. Many farmers feel limited by these seasonal outdoor markets too—in the winter months when they could be selling fresh/frozen and value-added products such as different meats (beef, buffalo, pork, chickens), eggs, milk, ice cream, butter, cheeses, maple syrup, breads, jams, salad greens, and flowers.

On-farm sales rank third as a consumer preference for buying local foods. Some farmers sell by appointment or during limited hours, others invest in and combine agritourism with direct retail sales, such as, Sand Hill Berry Farms (Mt. Pleasant, PA) or Harvest Valley (Gibsonia, PA). Advantages to these "farm gate" sales, are personal and gratifying experiences—a consumer can meet and talk to the farmer, cultivate a personal relationship, and see where their food comes from. This has proven to lead to brand loyalty. For farmers, they get to understand what people want to buy, and they don't have to transport food to distant points of sale.

RECOMMENDATIONS:

1. Go where people shop: **develop a strong local food presence in existing retail markets.** Use the *Buy Fresh Buy Local*® banner to stake territory in stores where shoppers can quickly locate local farm products. Promote local foods there, educate consumers, offer farm tours, and cultivate relationships beyond the point of purchase.

Who: PASA

2. **Develop attractive and strategically located year-round indoor farmers' markets on Main Streets of medium-sized towns.** Develop as a destination with supporting attractions and amenities.

Example: Meadville Market House.

Who: Medium to large towns interested in economic revitalization in mixed-use areas. Local development corporations, planning commissions, farmers.

3. **Make meat and dairy products more accessible at farmers' markets.** Provide literature on sustainable raised, naturally-raised, organic, and pastured meats. Provide refrigeration or freezers where possible to maintain meats at frozen temperatures.

Who: literature provided by BFBL, or farmer. Coolers maintained by producer. Refrigeration facilities may be provided by market authorities or local development corporations.

4. Consider **region-wide marketing of places with on-farm, on-vineyard sales.** Regional promotion is cost effective. Promote in regional newspapers and/or in PASA's annual *Buy Fresh Buy Local*® consumer guide. Consumers can make adventures out of traveling, touring farms, sampling foods, and making purchases.

Who: Local Chambers of Commerce, regional economic development agencies, PASA, farmer associations, bed & breakfast guilds.

KEY CONCEPT 3

DISTRIBUTION NETWORKS

Distribution networks are critical infrastructure underpinnings to successful local food systems. Distribution tasks include marketing, taking orders, collecting, storing, and delivering perishable foods amongst partnering farms makes for complicated logistics. The reason for its absence in the region, apart from Paragon Monteverde, is the difficulty of achieving economies of scale and the expense of organized collection, cooling and re-distribution. Still distribution is a vital component of a functioning and viable local food system.

The majority of farmers in the focus groups stated they're not interested in joint distribution centers that support retail outlets or wholesale networks. They cite failed attempts at a joint distribution facility in Butler County and remain suspicious about co-operatives in general. Most farmers however, do not want to incur the burden of getting product to markets—it is time intensive and increasingly expensive for fuel. Their talents are best spent growing and raising food. Many farmers expressed keen interest in having food products picked up at the farm.

RECOMMENDATIONS:

1. Find strategic locations where farmers share **cool down facilities**. They deliver products there, share the cost of who arranges storage, pick up, and delivery times.

Who: farmers' collaboration; incorporated partnership (co-operative). Keystone Development Corporation can assist in organizational structure. PASA can assist w/ BFBL marketing and venues. Small business centers to work out business planning, investments and profit sharing.

2. Develop **real-world distribution models** designed to be economically viable that, at a minimum, cover the costs of the service.

Who: Ask business students to generate an economic feasibility model for distribution networks that meet multiple market needs in southwestern and northwestern PA. Carnegie Mellon's Heinz School of Public Policy: University of Pittsburgh's Graduate School of Industrial Administration. Other universities in northwest Pennsylvania: Clarion, Slippery Rock, Gannon, and Edinboro.

KEY CONCEPT 4

PARTNERSHIPS AMONG FARMERS AND WITH RETAILERS

Farmer Survey results were mildly in favor of farmers working together to develop value-added products, or, to produce regionally branded products. Sixty-six percent expressed interest in participating in a group that produces and sells a regionally branded product; 58% said they would like to produce a value-added product (such as ice cream, cheese, frozen foods). [See Section VIII Maps for locations of interested farmers and local.]

PASA invited farmers to participate in six focus groups throughout Western PA to discuss production of value-added and regionally branded products. The discussions revealed farmers' concerns and perceptions of barriers to collaborative production and marketing.

1. **Brand Identity:** Most farmers were concerned about losing their farm's individual brand that they have worked hard to develop. If they were to enter into a partnership with other farmers, whose brand would be used? What would the new brand look like? What is its message?
2. **Production Techniques:** Farmers were also concerned about ensuring consistent quality standards among like products. Each farm has their own method of growing produce or raising livestock—how would they agree to produce consistent quality, taste, and grading standards?
3. **Shared Facility Investment:** Farmers were also concerned about the cost of time and money investments into a centralized distribution/processing facility in

order to process, package, and ship their products. They cited failed examples in Butler County and other parts of the region that have not turned out well.

In the end, farmers in the focus groups indicated that they'd like to produce their own products and maintain their own brands while using the **Buy Fresh Buy Local**® label as an umbrella promotional and marketing tool. Focus group participants suggested creating a direct retail sales environment within local grocery stores to generate a higher return on investment than the wholesale marketplace.

Responses from survey participants and focus group participants about farm partnerships were mixed. While collaborative production may not seem like an attractive idea to some farmers, others like the idea. Still others are more interested in partnering with grocery store managers to explore the development of a retail presence just for local foods.

RECOMMENDATION

Identify Grocery Stores for Strategic Retail Partnerships: Based upon consumer behavior and the feedback from local farmers, Tripp Umbach recommends identifying grocery stores in more affluent communities to approach for initial strategic partnerships. Develop one pilot retail outlet in partnership with either a Whole Foods-like or a Giant Eagle Market District-type of store. The goal of the retail outlet would be to develop a **Buy Fresh Buy Local**® section of the store dedicated to local products with individual farm brand identities.

The **Buy Fresh Buy Local**® venue will provide local food producers with an opportunity to sell their products for a higher return on investment; educate the consumer with product “stories” about where the food comes from; and, connect the farmer with the consumer and build brand loyalty. Once a successful partnership is in place, up and running, and tweaked for improvements, the pilot store business plan may be replicated in other stores throughout Western Pennsylvania.

Who: PASA

KEY CONCEPT 5

WORKFORCE ASSESSMENT IN PA

The overall farm labor shortage is a pressing challenge for farms small and large. The seasonal work, demanding labor, lack of access to legal migrant labor, unskilled local labor, low wages, and inability to provide healthcare benefits are obstacles for finding and retaining an agricultural workforce. Farming has largely relied heavily on the nuclear farm family to supply labor. That future is uncertain too. Forty-six percent of farmers surveyed said their children are currently involved with the farm business; 20% say their children will take over the family farm when they retire; 35% are unsure; 45% say their children will *not* be taking over the farm. This raises concerns about family farms in Western PA and brings into question where new farmers and farm labor will come from. These issues are pressing: 76% of farmers surveyed are 50 years or older.

In Pennsylvania, 61,051 farm proprietors and 23,467 wage and salaried employees work on a day-to-day basis (USDA 2002). This equates to 0.38 workers to one farm proprietor. The reasons for this are complex and myriad as mentioned above. (see RFIN Newsletters Mar-April '07 ("Non-Local Labor" and May-June '07 ("Hire Fresh Hire Local?" at www.pasafarming.org for more in-depth coverage.)

The statistics above parallel Fred Kirschenmann's findings⁹ at the Leopold Center for Sustainable Agriculture at Iowa State University. Studies there show a sharp decline in the number of middle-sized farms on a national level from 1997 and 2002. This is consistent for the region and the state of Pennsylvania. This trend will continue unless local farm operations can improve profitability, secure a consistent labor base, and/or operate on smaller but more profitable farms with high-end niche markets.

Workforce Reinforcement: Even if the *Buy Fresh Buy Local*® retail venues and value added partnerships are successful, the number of farms, farmers, and farm workers in the

⁹ Leopold Center for Sustainable Agriculture: "Serious Concern about Farm Community's Disappearing Middle Sector", Fred Kirschenmann, 2-9-04. www.leopold.iastate.edu

region are likely to decline. Successful agriculture and local food business models need to be developed, implemented, improved upon, and replicated throughout the region.

Communicating successful case studies of farmers with viable businesses in Western PA with strong returns on investment can provide incentive and encourage young people to grow food, raise meats and create value-added products. Educational partnerships need to be cultivated with local school districts in K-12 and colleges/universities, PSU Extension, and other organizations that promote youth in farming.

RECOMMENDATIONS:

1. **Re-think commodity-driven agriculture:** Good-tasting, healthy, fresh food is not cheap. Subsidy driven agriculture is reliant on mono-cultural industrial systems which require high levels of external inputs to maintain fertility and yield. The system is based on weights and volumes rather than nutrient density and quality of products.

Who: Everyone who eats and buys food. Focus on quality and nutrient density.

2. **Develop niche markets** for high quality products.

Who: farmers, food entrepreneurs, chefs, retailers, Internet sales.

3. **Improve business practices and business planning** among small farms.

Who: farmers and business support groups such as Penn State Extension Business Planning's Jon Laughner; Katz Small Business Development Center at University of Pittsburgh

4. **Improve cultivation or breeding practices**—get the right species on the land and soil.

Who: farmers and enlightened technical assistance people; farmers networks, PASA conference speakers / practioners

5. **Increase profitability for small farms**, thereby retaining farms and farmers, and attract new farmers
Who: farmers, entrepreneurs, business support people, technical assistance organizations.

6. **Save farms from development** while new generation of farmers comes on line.
Who: County Conservation Districts, WAGN (Women in Agriculture Network).

7. **Push for state and federal policies that make legal migrant labor accessible and consistent.**
Who: Pennsylvania Farm Bureau, U.S. Department of Labor, PASA.

8. Look for **successful models for farm-based education and training, mentoring, and apprenticeship programs** that work in this country. See Cherry Valley Organics.
Who: farmers and young or entry-level farmers. Paid internships. Profit sharing. Land spin-off. Shared business plans.

KEY CONCEPT 6: AGRITOURISM

Agricultural tourism is a common thread throughout this study. The majority of participants mentioned the strides being made in agritourism nationally and locally and recommended agritourism as a secondary revenue stream to help sustain farming operations in Western Pennsylvania.

The market opportunity for agritourism in the United States is clear. According to Purdue University, travel and tourism grew by 28% between 1997 and 2007³. The *fastest growing segment is nature and agricultural-based tourism* growing 30% annually. A study completed by the Travel Industry Association of America shows that 62% of all American adults have traveled to a small town or village in the United States in the past three years.

Americans, specifically nature tourists, spend \$7.5 billion annually on travel alone. Estimates show more than 75% of Americans living in an urban setting enjoy going to rural areas for an “interesting experience.”

One successful example of agritourism is the state of Vermont. Recent studies have shown that agritourism-related activities in 2000 resulted in additional income, statewide, of \$10.5 million. The study reported 31% of all farms or 2,100 farms in Vermont received an average of \$5,000 from agritourism. Small- and mid-sized farms benefited the most from participating while larger farms did not show interest.¹⁰

Another success story comes from an article from by Desmond A. Jolly⁴ the Department of Agricultural and Resource Economics at University of California Davis which shows the market opportunities in California for agritourism has increased in both supply and demand of agricultural products and services. Sixty-one percent of their survey respondents reported spending between \$5 and \$40 on a typical farm visit while another 16% spent more than \$40.

The primary benefit of agritourism is the ability to diversify opportunities for local farmers to generate additional revenues. Other reasons include: “an opportunity to educate the local community about the economic and quality of life benefits of agriculture, providing economic incentives in order to reduce friction in the agricultural-urban interface in an effort to preserve agricultural land, and to enhance the appeal and demand for local products fostering regional marketing efforts and creating value –added and direct marketing opportunities” (Jolly).

The main focus of the RFIN business plan should be to help develop product opportunities and partnerships with local farmers. As the value-added and retail outlet partnerships develop and begin to produce strong financial returns, agritourism can then be implemented as an additional revenue source. Good examples of agritourism include, but

¹⁰UC Small Farm Center Research Brief: "Consumer Demand for Agricultural and On-Farm Nature Tourism", Desmond A. Jolly, January 2005. www.sfc.ucdavis.edu

⁴ Purdue Tourism Hospitality Research Center: "Rural Tourism", <http://fred.e-enterprise.purdue.edu/wps/portal/>

are not limited to: Spring House (84, PA), Soergels Orchards (Wexford, PA), and Sand Hill Berry Farm (Mt. Pleasant, PA).

RECOMMENDATIONS

1. Study **alternative insurance requirements** for both single payers and explore group rates. Costs associated with agritourism due to insurance requirements can be strong barriers to entry for small farms.

Who: PASA and collaborators and regional insurance brokers.

2. Work with economic development groups like the Progress Fund and others to develop financial support and plans for agritourism farms and wineries in Western Pennsylvania.

Who: PASA, farm and wineries interested in agritourism.

3. Work with the Pennsylvania Department of Tourism and regional tourism agencies to post a list of agritourism farms and wineries in Western Pennsylvania, in their regional publications and in PASA BFBL publications

Who: PASA

KEY CONCEPT 7:

CONTINUE NETWORK COMMUNICATIONS

During the RFIN project analysis, Image Earth wrote eleven topical newsletters that explored the success stories of farmers and food entrepreneurs, and covered obstacles and solutions to issues that need to be addressed in order to develop a regional food system. Topics covered include: Meat Processing (May '06), Wholesale Perspective (Jul-Aug '06), Transportation (Jan-Feb '07), Successful Food Entrepreneurs (Sep-Oct '07), Co-operatives (August '07), Dairy (Nov-Dec'07), Farm Labor (Mar-Apr '07 and May-Jun '07).

The RFIN Newsletter grew in circulation with requests coming from all ag-related sectors. The first Newsletter was emailed to 400+ people. The last one, 12 months later was sent to over 1,200 people. The Newsletter was an important RFIN presence during and after the study's data collection and analysis phases.

1. **Outreach and Communication with local farmers:** PASA should continue to provide monthly or bi-monthly newsletters about building a regional food system. This makes the effort seem alive, sparks interest, and inspires people with new ideas proven to work. The Newsletter can help build a network, and serve as a resource for important contacts throughout the 19-county network.

Who: PASA

2. **An educational newsletter for K-12** could be circulated to teachers and school board members that suggests teaching modules and points to very real lessons about food, farms, health, and the local economy.

Who: PASA and collaborators, local school districts, farmers, 4-H.