Based on the report, **GROWING LOCAL: Expanding the Western North Carolina Food and Farm Economy** (2007 Laura D. Kirby, Charlie Jackson, and Allison Perrett)

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Appalachian Sustainable Agriculture Project (ASAP) is a nonprofit organization that supports farmers and rural communities in the mountains of Western North Carolina (WNC) and the Southern Appalachians. ASAP’s vision is to build a strong local food system in the region as a way to help sustain the local farm economy, preserve the rural character of the region, and support human and environmental health.

ASAP works to increase local consumption of locally-grown food and farm products through a Local Food Campaign built around public education and promotion, farmer training and support, research, and policy development. In response to the findings from this report ASAP introduced the Appalachian Grown™ program in 2006 for certifying farms and farm products grown or raised in Southern Appalachian counties on family farms. ASAP’s work has contributed to rising demand for local food and farm products by consumers, restaurants, retail food stores, businesses, and institutions within the region.
This summary is drawn from the full 320 page *Growing Local* report available from ASAP at [www.asapconnections.org](http://www.asapconnections.org). The full report is the culmination of a multi-year research project funded by the Southern Sustainable Agriculture Research and Education (SSARE) program, a division of the United States Department of Agriculture (USDA), whose goals include advancing knowledge about sustainable farming systems. This research looked at: (1) what food and farm products are currently produced in the region; (2) how much of what is produced is also consumed in the region; (3) the potential for increasing local consumption of locally-produced food and farm products as a way to strengthen the regional farm economy; and (4) where investment of resources or other actions could eliminate barriers currently impeding the purchase of local food.

This paper summarizes key findings. Findings are based on results from twenty separate surveys conducted between 2003 and 2007 as well as analysis of secondary data. Stakeholders surveyed and interviewed include consumers, farmers’ market shoppers and vendors, North Carolina Cooperative Extension (NCCE) agents, farms engaged in Community Supported Agriculture, college foodservice directors, summer camp directors, child nutrition directors in public school districts, hospital foodservice directors, tourism agencies, personnel in Latino centers, dairy farmers, grocery stores, restaurants, and nursery growers. The geographic area studied is the twenty-three Appalachian counties known as Western North Carolina (WNC).

Underlying the research is the assumption that local markets can improve farm profitability. The profit potential lies in price premiums tied to strong demand for local food as well as the possibility for reduced distribution and transportation costs associated with selling to local markets. Only a fraction of all food consumed in the region – less than one percent based on estimated local food spending—is locally-grown food. For nearly every category of food produced in WNC, more is consumed locally than is currently produced locally. This gap between production and consumption, coupled with strong demand, creates a tremendous opportunity to expand the local food system to meet consumer demand and strengthen markets for local farms.

**Growing Local: Opportunities**

The WNC farm economy is in a period of transition. To some extent, change is being driven by the end of the federal tobacco price support and supply control program. Other shifts are occurring simultaneously. In the decade between 1992 and 2002, the region experienced a 16 percent increase in fruit and vegetable crops and a 25 percent increase in acres devoted to non-food crops. Direct Sales – the USDA category used to describe transactions directly between farmers and consumers – have more than doubled and are expected to continue growing, bolstered by strong demand for locally-grown food. For the region of WNC, the research finds a desire by consumers and businesses for $36.5 million worth of locally grown fresh fruits and vegetables and nearly $452 million worth of all types of food produced locally, including meat, dairy, and processed products. In this context of transition, the potential for expanding local markets for local farm products is significant.
Key Findings

There are good potential local markets for farmers in WNC because of strong demand for local food

According to the market research firm the Hartman Group, “local” is one of the food attributes most highly valued by consumers nationwide and a major trend affecting the food industry. JWT, the largest advertising agency in the U.S., recently identified local food as one of the top ten trends for 2007 and predicted that consumer demand will shift from organics to locally-sourced food. According to the research group Packaged Facts, the market for locally-grown food has grown steadily and will reach $7 billion in 2011.

Surveys designed to measure WNC consumer perceptions of locally-grown food not only demonstrate strong demand, they suggest the willingness of consumers to pay more for local food. For the majority of consumers surveyed, local food represents a fresher, tastier option to foods produced in more distant regions. For those consumers, the purchase of local food represents a way to support local farmers and local communities, protect the environment, and preserve the rural character of the region. In terms of spending, consumers reported spending a greater percentage of their total monthly food bill on locally-grown food in 2004 compared to 2000. More than three quarters of residents surveyed said that when local foods cost a little more, they are worth the extra cost.

Spending at farmers’ markets is also increasing in the region. Average per capita expenditures increased from 2003 to 2004 and the percentage of weekly shoppers spending more than $20 at the markets increased from 24 percent in 2003 to 36 percent in 2004.

The research also demonstrates the value of labeling local products. Eighty-two percent of WNC respondents indicated that they would buy more locally-produced food if it were labeled as local. Local labels convey product values of freshness, quality, and taste, and the labels appeal to consumers’ desire to support local farms and local communities. While not as important in direct markets, labeling local farm products is critical in larger-scale markets to both enable consumers to readily find locally-grown products and to ensure that producers receive the full value of any premium associated with locally-grown food.

To better understand and quantify market demand and establish realistic goals for sourcing local food, this research calculates desired spending on local food for specific market segments. Desired spending is a calculation that estimates spending by businesses and organizations with high interest in local food. It also factors in climate conditions affecting the seasonality of local food production.

Desired spending is further broken down to distinguish between (1) demand for only fresh fruits and vegetables and (2) demand for all foods (i.e., fresh produce plus meat, dairy, and processed foods). This distinction is important because more locally-grown produce is currently consumed in WNC than any other type of local food. Produce also has fewer infrastructural requirements than other types of food, so local produce sales hold better potential for increases in the short term than sales of other farm products.
The research found high interest in procuring locally-grown food across all market segments surveyed. Institutions in particular expressed a strong desire for food from local farms. An institution is a public or private organization that serves food to groups of people. More than 70 percent of Child Nutrition Directors and 87 percent of hospital Foodservice Directors expressed high interest in buying locally-grown food. Retail grocery stores hold the greatest promise in terms of total market value, accounting for more than 90 percent of desired local food spending by large-scale buyers in the region.

Based on market surveys and adjustments for seasonality and climate conditions, the total annual amount desired by WNC consumers and businesses is $36.5 million for fresh fruits and vegetables and $451.9 million for all foods.

Where does $36.5 million come from to purchase produce from local farms? If just half of WNC’s families spend $11 each week on locally-grown food for four months of the growing season over $36.5 million stays in the local economy helping sustain our family farms.

**Despite strong demand, only a small fraction of food consumed in the region is locally-grown**

Less than one percent of all food consumed in the region—based on estimated local food spending—is locally-grown. The region’s one million residents spent an estimated $2.2 billion on food in 2004 according to the Bureau of Labor Statistics’ annual Consumer Expenditure Survey. According to this survey, the average household spent $3,119 on groceries and $2,199 on food consumed in other places. For WNC, where 1,060,061 residents is equivalent to an estimated 424,024 households, that roughly translates into $1.3 billion spent on food consumed at home and about $932 million spent on food consumed away from home.

In addition to spending by the region’s residents, there are millions of visitors each year who purchase food from area businesses. Estimated tourism spending at restaurants in 2004 was around $400 million based on a total of 21.5 million visits to the region that year. Adding tourist food spending to resident food spending generates total estimated food spending in the region of approximately $2.6 billion.

### Desired Spending on Locally-Grown Food

**Summer Camps**
- Fresh fruits and vegetables: $103,680
- All foods: $672,000

**Public Schools**
- Fresh fruits and vegetables: $278,460
- All foods: $4.8 million

**Colleges and Universities**
- Fresh fruits and vegetables: $338,000
- All foods: $3.2 million

**Hospitals**
- Fresh fruits and vegetables: $289,536
- All foods: $11.2 million

**Specialty Food Stores**
- Fresh fruits and vegetables: $468,000
- All foods: $6.6 million

**Restaurants**
- Fresh fruits and vegetables: $760,500
- All foods: $13 million

**Direct Markets** *(Farmer to Consumer)*
- Fresh fruits and vegetables: $6.2 million
- All foods: $21 million

**Full-Service Groceries**
- Fresh fruits and vegetables: $13.5 million
- All foods: $189.2 million

**Total**
- Fresh fruits and vegetables: $36.5 million
- All foods: $451.9 million
Strategies to “support local” have been identified

The disparity between demand for and supply of locally-grown food is complicated by the processes involved in moving food from farm to market; processing requirements for different types of food; and state, federal, and local policies that do not support local farms.

Supply chain management practices, for example, which formally link large producers, processors, wholesalers, and retailers, pose serious challenges to small and mid-size farmers. With strong demand for convenient, ready-made foods by consumers, institutions, and businesses, the lack of large-scale processing facilities in the region is also a barrier. This includes the absence of a USDA-inspected slaughter facility in the immediate region for producers of livestock and poultry, which means that farmers must incur additional costs to travel to processing facilities. Dairy is also undergoing sharp declines with projections of major losses of dairies in the region over the next decade.

Expanding local consumption of local farm products will require restaurants, food stores, and other businesses and institutions that serve or sell food to modify food procurement and distribution systems.

To some extent, food retailers in the region are currently altering their practices to accommodate more local food. Significant pieces of processing infrastructure are also present in WNC, including facilities for large-scale milk processing and distribution.

Despite industry consolidation, regionally-based systems of distribution—wholesale distributors, packers, farmer cooperatives, systems of backhauling—exist in the region that have the potential to help local farmers gain access to larger-scale markets. With increasing demand for local food, these systems are potential points of intervention that, with further development, could create space for local farmers in a tightly integrated market.

In addition to the changes that need to occur in procurement and distribution practices, the process of re-localizing the food system will require attention to other areas:

- Public awareness about benefits of a strong local food system
- Regional infrastructure for processing local farm products for local markets
- Training, education, and support for farmers to help them access local markets
- Land use and development policies in the region that support local farms
- Policies and support programs that address farm transition issues
- Public policies that support local farms
- Season extension of production of fresh fruits and vegetables in the region
- Food distribution to more retail outlets and into the places where people already shop
- Farm labor issues
- “Local” identification at the retail level to both maintain the integrity of local and increase its value
Farming is important to the WNC economy

The region’s farms earned $543 million by selling farm products in 2002 (the most recent Agriculture Census year). There are more than 12,212 farms in the region – approximately one-fourth of all farms in the state. Capitalizing on strong demand for local food and farm products is one way to strengthen the region’s farm sector because local markets create opportunities for farmers to earn a larger share of the food dollar.

A strong farm sector is important for its own contribution to the region’s economy, but it also plays an important part in maintaining tourism, the region’s number one industry. The $2 billion tourism industry depends heavily on the scenic landscapes and views made possible by the region’s farms, which occupy over one million acres in WNC.

There are also strong potential connections between farms and restaurants. “Food, drinks and meals” is the number one category of spending for visitors to WNC, including both overnight visitors and those visiting for just a day. According to the International Culinary Tourism Association, tourists are increasingly interested in finding locally-grown food in restaurants when they travel, and restaurants that cater to tourists are facing heightened pressure to feature fresh and unique ingredients. This trend creates opportunities for local producers to sell farm products to chefs and restaurants.

… and intricately related to land use

From zoning to moratoriums on development, land-use planning is one of the most pressing and contentious issues in the region right now. The contribution of farming to the region’s rural character and overall economy make it fundamental to any approach to land-use planning. Expanding the local food system is both a legitimate and desirable approach to land use and a way to strengthen the region’s farm sector and overall economy.

Farming has always been a prevalent way of life in WNC and vital to the region’s economy. Today WNC has about one-ninth of the population of the state, yet approximately one-fourth of the farms. Of total land area in WNC, 1.5 million acres is protected public land and 3 million acres is private land. The more than 12,000 family farms in the region are situated on one-third of this privately-owned land.

Small farms predominate in WNC, with more than half of all farms operating on fewer than 50 acres. The small average farm size makes the region particularly vulnerable to a global food system dominated by fewer, larger farms, and fewer, larger markets. In WNC, the amount of farmland has been steadily declining, with approximately 12 percent fewer acres of farmland in the region in 2002 compared with 20 years ago. Many mountain counties have lost farms at rates approaching 20 percent in the last decade. The number of farmers declined from 76,065 in 1970 to 12,212 in 2002. In 2002, more than half of WNC farms reported net losses.

While some small farms stay in farming for reasons other than profitability, such as continuing a family tradition or maintaining a rural lifestyle, the long-term sustainability of the farm sector depends on improving the ability of regional farms to be profitable.
Room to Grow

Across all markets – from direct to consumer to the largest regional grocery chains – there is growing local demand for food from southern Appalachian farms. Current spending on locally-grown food is estimated at $14.5 million. Desired spending on local food—a number that reflects changes in infrastructure that would allow businesses and institutions to procure desired quantities and types of local food—represents a much higher amount and is calculated at over $451.9 million. This figure equals 18 percent of total food spending by consumers and visitors in the region (compared with less than 1 percent today) and represents a long-term goal that can be accomplished only if there are significant improvements in local food processing and distribution systems as well as changes in consumer purchasing.

High demand, together with a long growing season, fertile soils, and innovative farmers result in good and local market opportunities for farmers in the region. With improvements in infrastructure to accommodate more local there is ample room to grow markets as well as welcome new farmers. With policy change and regional support for family farms there is the opportunity to strengthen rural economies and slow the loss of farmland. All of these factors combined provide WNC with the opportunity to continue to have many family farms that maintain a scenic landscape while providing the citizens of the region the foods they desire.

Multiplier Effect

The local multiplier effect (LME) is a term first used by economist John Maynard Keynes in his 1936 book *The General Theory of Employment, Interest, and Money* to describe the way that dollars are recirculated within a local economy before leaving through the purchase of an import. According to the theory, $36.5 million of spending on local farm products would add more than that to the local economy as local farmers re-spend the money on products and services in the local community.

There are many factors which influence the number of times dollars are thought to recirculate, but LME’s are commonly reported to range from 1.5 to 3.0. Within that range, the impact to the local economy of $36.5 million in spending on local farm products would be $55 million to $109 million.

$452 million of spending on local farm products would add, according to the multiplier formula, between $678 million to nearly $1.4 billion.
Recommendations

The following are based on analysis detailed in the full *Growing Local* report:

**Develop Trusted Local Food Labels**

This research confirms the need for better labeling of local foods where people shop and eat. Labeling allows consumers to act on their preference for locally grown food and it allows price premiums associated with the food being locally grown to accrue to producers. Local branding is a way to add value to local farm products.

**Boost Outreach Efforts Targeting Larger-Scale Markets**

ASAP’s *Local Food Guide* provides information to consumers about where to find locally grown food in the region, but similar publications are needed to show larger-scale buyers where to find locally grown food and how to make local purchasing work. Similar publications specific to large scale buyers such as hospitals, summer camps, school and colleges are needed.

**Support Farmers’ Efforts to Satisfy Local Demand**

Farmers may need assistance and information regarding strategies for selling to local markets. For direct markets, basic business management and marketing skills are important. For larger scale markets, market assessment assistance, business planning, information on packaging and labeling requirements as well as how producers can address buyers’ food safety concerns are critical to success. Growers may also need information about shifting to fruit and vegetable production and instruction on how to use more sustainable production methods, which are increasingly important in local markets.

**Create State and Local Policies to Favor Local Food Distribution and Sales**

Processing requirements for meat and dairy products vary considerably from state to state. North Carolina should look to models in other states and take action to favor local food systems. By working with policymakers at both state and local levels, local food advocates can not only pursue changes in policies affecting producers in the region, but keep agriculture issues at the forefront of the many regional planning and promotion efforts. Policy advocacy is also important as it relates to expanding the reach of local markets into low-income market segments. Accepting food stamps, for example, can be logistically problematic for markets that traditionally operate on a cash economy.

**Improve Public Education and Awareness About Local Food**

Strong demand for locally grown food and farm products confirms that efforts to build public awareness and support for local food are working and should be continued. It may be appropriate to add new messages to the public education campaign, including information about how to eat a more seasonal diet or how to recognize local food in the marketplace.
Expand Direct Marketing Channels
The potential for expanded sales through farmers markets lies in increasing the number and location of markets in addition to continuing the market promotional activities that have been so effective. Expanding tailgate market sales also means offering training, workshops and other resource materials for farmers interested in selling at the markets. Community Supported Agriculture programs hold good potential for expansion in the region.

Expand Local Food Activities Throughout the Region
Local food awareness and activities have been concentrated in Asheville and surrounding counties. Expanding opportunities for farmers throughout the region to sell their goods locally could mean opening new tailgate markets in more counties. It could also involve expanding the Mountain Tailgate Marketing Association or establishing similar organizations throughout the region.

Foster Collaboration Around Shared Goals
New partnerships need to be formed, relationships expanded, and roles clarified in order to move towards a network of successful local food systems within the region. The agenda is large, broad and far more than any one organization can handle effectively. Outside of agriculture, there are other groups with which partnerships are critical for advancing the local food agenda, including farmworker support agencies, organizations concerned with hunger, health, and food security, and governmental organizations that can facilitate policy changes influencing the ability of local farm products to reach local markets.

Adapt and Encourage Infrastructure for Distribution and Processing
Rebuilding a local food system depends on building the capacity for regional systems of food procurement and distribution. Systems of backhauling and cooperative strategies that pool the resources and products of local farmers have the potential to overcome the market barriers facing local farmers. Steps may involve adapting existing components of the food distribution system to accommodate local as well as establishing new facilities for local processing in the region.

Develop and Support Working Farmland Preservation and Transition Programs
Based on a combination of issues such as the advancing age of farmers, high development pressure and unmet demand for local food and farm products, there is a need for programs and policies to help maintain working farmland in the region. This can be accomplished through initiatives such as farmer transition programs, farmland preservation activities and other strategies affecting land use. Unrelated to land use but still closely related to the ability of the region’s farms to continue and/or expand food production are programs and policies affecting seasonal farm labor. With many individual farm support agencies already working on these issues, this recommendation is as much about achieving a high level of coordination and collaboration among existing agencies as it is about developing any new action steps.

Align Tourism and Agriculture
Tourism and agriculture are two of the largest industries in the region, but except for on-farm agritourism, they operate more or less independently of each other. There are opportunities for both industries to benefit from working together to promote food and farm tourism in the region.
Surveys Contributing to ASAP’s Room to Grow Report

Locally Grown Foods Strategic Positioning Research
A phone survey of 300 randomly selected consumers in Buncombe, Madison and Henderson counties conducted in 2000 and repeated in 2004. Respondents were consumers who were over 18 years of age who reported that they do the majority of grocery shopping for their households.

WNC Food and Farm Economy: Highlights of a Data Compilation
This compilation includes selected data items from the USDA Census of Agriculture for the 23 counties of WNC, as well as information showing estimated fruit and vegetable consumption in the region.

A Market Analysis of Tailgate Farmers’ Markets of Buncombe and Madison Counties
Face-to-face interviews were conducted with 694 shoppers at six tailgate markets in the summers of 2003 and 2004. An additional 732 rapid-response “dot surveys” were completed in 2003 in which shoppers were asked to answer 5 questions by placing a dot on a poster listing possible answers to the questions.

Results from a Survey of Farmers’ Tailgate Market Vendors in Buncombe and Madison Counties
Written questionnaires were completed anonymously by 61 vendors representing eight tailgate markets in Buncombe and Madison Counties during the summer of 2003.

Community Supported Agriculture in the French Broad River Basin
In 2004, an email questionnaire was completed by 12 Community Supported Agriculture (CSA) farms listed in ASAP’s Local Food Guide that year.

Results from a WNC Farm-to-College Survey
Phone interviews were completed with Foodservice Directors at 15 of 17 (88%) colleges and universities in WNC during the 2004-2005 and 2005-2006 academic years.

Summer Camps as a Potential Market Channel for Locally Grown Food in WNC
Representatives from 23 camps completed an online survey in the Spring of 2006.

Defining Success in the Farm-to-School Arena
In-depth interviews were conducted with Child Nutrition Directors in five public school districts in WNC in January of 2006. A written questionnaire was completed by other Child Nutrition Directors.

Restaurants as a Market Channel for Locally Grown Food in WNC
This report uses data from the 2002 US Economic Census to project the potential for locally grown food purchases by full-service restaurants in WNC.

Local Food Purchasing by Highly Motivated Businesses and Consumers in WNC
This report presents data from two surveys: 1) In response to a link posted on ASAP’s website, an online survey of consumers with high interest in local food was completed by 87 consumers during the fall of 2006; 2) A written questionnaire was completed by 40 organizations with established high interest in buying locally grown food in the fall of 2006.

A Survey of Licensed Dairies in WNC
A written questionnaire was completed by 27 dairy farmers in WNC during fall of 2006.
The Value of Appalachian GrownTM labeling for Nursery Growers in WNC
A written questionnaire was completed by 109 nursery growers (not including Christmas tree growers) in WNC during the summer of 2006.

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A Survey of Local Food Activities in the Southern Appalachian Region
Phase I of this research, completed during 2004, involved an email survey of Agricultural Extension agents and selected non-profit organizations in 100 counties of Southern Appalachia. The purpose of this initial survey was to gather information about local food campaigns and activities in the region. Phase II involved in-depth interviews in 2006 of 22 Program Directors of non-profit and academic groups working on local food system issues in the Southern Appalachian region.

Hospital Foodservice in WNC: Implications for the Local Food System
A phone survey of 15 hospitals in WNC was conducted during the fall of 2006.

A Survey of NC Cooperative Extension Agents in WNC
During the fall of 2006 a written questionnaire was completed by 22 NC Cooperative Extension agents representing counties of WNC and the Cherokee Indian Reservation.

A Survey of Shoppers at the WNC Farmers’ Market
Face-to-face interviews were conducted with 75 shoppers at the WNC Farmers Market during the summer of 2006.

Opportunities for Expanding Food and Farm Tourism in WNC
Eleven tourism agencies representing counties of western North Carolina completed an online survey in the summer of 2006.

Exploring the Role of Latinos in the WNC Food System
Seven Latino Centers in WNC were asked a series of questions about Latino farmers, farmworkers, restaurant owners and tiendas in their communities.

The Infrastructure of Food Procurement and Distribution: Implications for WNC Farmers
This report examines the food industry in the U.S. and its implications for farmers in WNC who want to grow for and sell to local markets. Local patterns of distribution are presented as models with an emphasis on their potential to accommodate more local food with further development. Data on local systems are drawn from participant observation; from formal and informal interviews with local producers, processors, and wholesalers; and from local news outlets.

Food Policy Councils: What and Why?
This paper reviews the work of Food Policy Councils in the U.S.
Southern Sustainable Agriculture Research and Education (SSARE)
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*SARE provides grants and information to improve profitability, stewardship and quality of life*

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