



Local Food and Farm Assessment: Mount Pleasant, South Carolina

Prepared for: The Town of Mount Pleasant, SC

By: Appalachian Sustainable Agriculture Project (ASAP)

306 West Haywood Street

Asheville, NC 28801

November 8, 2011



Funding for the work reported here was provided by the USDA
Sustainable Agriculture Research and Education Program.

TABLE OF CONTENTS

<u>INTRODUCTION</u>	5
<u>TOWN OF MOUNT PLEASANT AND CHARLESTON COUNTY DEMOGRAPHICS</u>	5
<u>PART I: AGRICULTURE IN CHARLESTON COUNTY, SOUTH CAROLINA</u>	6
CURRENT PRODUCTION.....	6
TRENDS IN FARMING AND FARMLAND.....	8
AGING OF THE FARM POPULATION.....	9
<u>OPPORTUNITIES IN LOCAL MARKETS</u>	10
<u>CONSUMER FOOD SPENDING AND CONSUMPTION FIGURES FOR CHARLESTON COUNTY</u>	11
CONSUMER SPENDING.....	11
CONSUMPTION ESTIMATES.....	11
<u>LOCAL PRODUCTION</u>	15
SUMMARY OF LOCAL MARKET POTENTIAL FOR LOCALLY GROWN FOODS.....	17
<u>PART II: KEY RECOMMENDATIONS FOR THE TOWN OF MOUNT PLEASANT</u>	18
TOURISM AND AGRICULTURE.....	19
LOCAL FOOD GUIDES.....	20
LOCAL BRANDING AND CERTIFICATION PROGRAMS.....	20
EXPERIENCES AROUND LOCAL FOODS.....	21
FARM TO CHEF PROGRAMS.....	21
FARMERS MARKET TECHNOLOGY.....	22
LOCAL FOOD PURCHASING POLICY.....	22
CURRENT REGULATIONS.....	23
COMPREHENSIVE FARMLAND PLAN.....	23
AGRICULTURAL ZONING DISTRICT.....	24
URBAN GARDEN DISTRICT ZONING.....	24
PURCHASE OF AGRICULTURAL CONSERVATION EASEMENTS.....	25
TRANSFER DEVELOPMENT RIGHTS.....	25
TAXES.....	25
FOOD POLICY COUNCIL.....	27
FOSTER COLLABORATION AROUND SHARED GOALS.....	27
<u>APPENDIX A. CURRENT FOOD AND FARM LEGISLATION IN SOUTH CAROLINA</u>	28
<u>APPENDIX B. FURTHER READING AND RESOURCES</u>	29
<u>APPENDIX C. EXAMPLES OF THE RECOMMENDATIONS FROM AROUND THE COUNTRY</u>	30

LIST OF TABLES AND FIGURES

TABLES

TABLE 1. VALUE OF AGRICULTURAL PRODUCTS SOLD IN CHARLESTON COUNTY 7

TABLE 2. NUMBER OF FARMS AND FARM SIZE IN CHARLESTON COUNTY 9

TABLE 3. COMPARISON OF CONSUMPTION AND PRODUCTION OF SELECTED FRESH FRUITS AND
VEGETABLES GROWN IN CHARLESTON COUNTY 13

TABLE 4. CONSUMPTION OF MEAT, SEAFOOD, AND DAIRY IN CHARLESTON COUNTY 14

TABLE 5. CONSUMPTION OF SELECTED CATEGORIES OF PROCESSED FRUITS AND VEGETABLES IN
CHARLESTON COUNTY 15

TABLE 6. PERCENT SHARE OF RETAIL PRODUCE SALES FOR SELECTED FRUITS AND VEGETABLES 16

TABLE 7. RETAIL SPENDING POTENTIAL FOR PRODUCE AND MEATS IN CHARLESTON COUNTY 17

FIGURES

FIGURE 1. NUMBER OF FARMS IN CHARLESTON COUNTY BY SIZE 9

BREAKOUT BOXES

THE MULTIPLIER EFFECT..... 11

IMPACT OF FOOD- RELATED TOURISM ON THE LOCAL ECONOMY 20

COST OF COMMUNITY SERVICES (COCS) STUDIES 26

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Introduction

This report is the result of a collaboration between Appalachian Sustainable Agriculture Project (ASAP) and the Town of Mount Pleasant Planning and Development Department. The information provided here is meant to guide the Town of Mount Pleasant in developing a Local Food Economy Plan. The geographic areas studied are the Town of Mount Pleasant and, for statistical purposes, Charleston County.¹ The purpose of the research is to:

- (1) assess the status of farm production in the area in relation to food spending and consumption by area residents**
- (2) identify potential options and opportunities to support local agriculture for the purpose of encouraging local food entrepreneurs, supporting and promoting agri-tourism as an economic development opportunity, and encouraging/supporting local businesses that can benefit from growth in local food production.**

The first part of this report summarizes agricultural production and consumption information for Charleston County. The second half of the report focuses on recommendations for the Town of Mount Pleasant to support local producers and markets.

Town of Mount Pleasant and Charleston County Demographics

- The Town of Mount Pleasant has a population of 67,843.² Charleston County has a population of 350,209.³
- For the Town of Mount Pleasant per capita personal income in 2009 was \$39,201.⁴ The per capita personal income of Charleston County was \$28,963.⁵
- In 2009 in the Town of Mount Pleasant, 96.9% of people 25 and over had graduated from high school and 61.8% had a bachelor's degree or higher.⁶ In Charleston County, 87.5% of people 25 years and over had graduated from high school and 36.7% had a bachelor's degree or higher.⁷
- In 2009, 3.8% of the Town of Mount Pleasant population lived below the poverty level.⁸ In Charleston County 16.4% of the population lived below the poverty level.⁹

¹ Town-level agricultural data is unavailable. The USDA reports agricultural statistics on a county level.

² *Town of Mount Pleasant 2011 Demographics Report*. May 2011. Town of Mount Pleasant Department of Planning and Development.

³ ~~Source of MS Census Bureau Quickfacts, <http://quickfacts.census.gov/qfd/states/45/45019.html>. (accessed May 2011).~~

³ Source: US Census Bureau Quickfacts, <http://quickfacts.census.gov/qfd/states/45/45019.html>. (accessed May 2011).

⁴ *Town of Mount Pleasant 2011 Demographics Report*. May 2011. Town of Mount Pleasant Department of Planning and Development.

⁵ Source: US Census Bureau Quickfacts, <http://quickfacts.census.gov/qfd/states/45/45019.html>. (accessed May 2011).

⁶ *Town of Mount Pleasant 2011 Demographics Report*. May 2011. Town of Mount Pleasant Department of Planning and Development.

⁷ Source: US Census Bureau Quickfacts, <http://quickfacts.census.gov/qfd/states/45/45019.html>. (accessed May 2011).

⁸ *Town of Mount Pleasant 2011 Demographics Report*. May 2011. Town of Mount Pleasant Department of Planning and Development.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

- The Town of Mount Pleasant is located along the middle of South Carolina's coast. It sits approximately 116 miles from Savannah, Georgia and 85 miles from Myrtle Beach, South Carolina. It lies 43 miles east of the east coast's major north-south Interstate 95, having direct access via Interstates 26 and 526.
- In 2009 for the employed population 16 years and older, the leading industries in the Town of Mount Pleasant were "Educational services, health care, and social assistance (30.7%), Professional, scientific, and management, and administrative and waste management service (13.7%), and Finance and insurance, and real estate and rental and leasing (10.9%)."¹⁰
- Major employers for the Town of Mount Pleasant are Local Government (600 employees), East Cooper Medical Center (560 employees), Motley Rice LLC (315 employees), and Mediterranean Shipping Co. USA Inc. (225 employees). Major employers for Charleston County are the US Navy (13,000 employees), Medical University of South Carolina (11,000 employees), Charleston Air Force Base (7,000 employees), and Charleston County School District (5,150 employees).¹¹
- Tourism is a major economic driver for the region. The Charleston Metro Chamber of Commerce estimates that tourism has an economic impact of over \$3 billion annually.¹² The Chamber further estimates that the average visitor spends \$50 per day on food and beverage.¹³

Part I: Agriculture in Charleston County, South Carolina

The majority of agricultural land in the Town of Mount Pleasant planning area is located outside the Town limits in the county. This report therefore concentrates on the whole of Charleston County for production and consumption related data.

As of 2007 – the year of the most recent USDA Census of Agriculture – Charleston County had 332 farms and nearly 42,000 acres of farmland.¹⁴ The average farm size in Charleston County is 126 acres. In 2007 the value of agricultural products sold from farms in Charleston County was \$24,041,000.

Current Production

The total land area in Charleston County is 587,840 acres.¹⁵ In 2007, 7% of that land—41,702 acres—was farmland. Of that farmland, 49% was classified as woodland, 27% as cropland, 9%

⁹ Source: US Census Bureau Quickfacts, <http://quickfacts.census.gov/qfd/states/45/45019.html>. (accessed May 2011).

¹⁰ US Census Bureau—2009 American Communities Survey.

¹¹ *Charleston Region Economic Profile 2009/2010*. 2010. Charleston Metro Chamber of Commerce.

¹² *Charleston Region Economic Profile 2009/2010*. 2010. Charleston Metro Chamber of Commerce.

¹³ *Charleston Region Economic Profile 2009/2010*. 2010. Charleston Metro Chamber of Commerce.

¹⁴ The USDA Agricultural Census is conducted every five years. The most recently released data is from 2007. Throughout this report, data is from 2007 unless otherwise indicated.

¹⁵ Source: US Census Bureau Quickfacts, <http://quickfacts.census.gov/qfd/states/45/45019.html>. (accessed May 2011).

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

as pasture, and the remaining 15% as “other uses.”¹⁶ Table 1 provides a breakdown of farms by category of farm products and shows the value of agricultural products sold for 2007.

Table 1: Value of Agricultural Products Sold in Charleston County¹⁷				
	2002		2007	
Average Per Farm	\$43,329		\$72,413	
	2002	2002	2007	2007
	\$ (thousands)	# farms	\$ (thousands)	# farms
Total Sales	18,068	417	24,041	332
Crops, including nursery and greenhouse	15,983	157	17,533	117
Grains, oilseeds, dry beans, and dry peas	(D) ¹⁸	- ¹⁹	203	20
Vegetables, melons, potatoes, and sweet potatoes	7,508	41	8,259	33
Fruits, tree nuts, and berries	969	53	(D)	49
Nursery, greenhouse, floriculture, and sod	7,315	56	8,223	27
Cut Christmas trees and short-rotation woody crops	(D)	3	(D)	1
Other crops and hay	(D)	16	(D)	15
Livestock, poultry, and their products	2,085	107	6,508	126
Poultry and eggs	45	22	62	39
Cattle and calves	(D)	45	477	40
Milk and other dairy products from cows	-	0	(D)	2
Hogs and pigs	6	7	1	4
Sheep, goats, and their products	9	17	19	14
Horses, ponies, mules, burros, and donkeys	(D)	34	(D)	36
Aquaculture	(D)	(D)	(D)	9
Other animals and other animal products	1	4	2	15
Value of agricultural products sold directly to individuals for human consumption²⁰	202	35	334	37

Source: USDA Census of Agriculture, 2007.

¹⁶2007 Census of Agriculture, County Summary Highlights, Charleston County.

¹⁷ Some totals are incomplete (less than actual) because county-level data is withheld by the USDA to protect the anonymity of individual farms.

¹⁸ The (D) used throughout the report indicates that specific data has been withheld by the USDA to avoid disclosing data for individual farms.

¹⁹ This symbol is used by the USDA to represent zero.

²⁰Includes the value of agricultural products produced and sold directly to individuals for human consumption from roadside stands, farmers’ markets, pick-your-own sites, etc. It excludes nonedible products such as nursery products, cut flowers, wool, etc.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

While some of the data for specific products are not available, the table clearly shows the importance of vegetables and nursery/greenhouse/floriculture products for the region, accounting for nearly 69% of agricultural sales in 2007. It should also be noted that, though specific information is limited, Charleston County is the number one aquaculture²¹ producer in the state.²² The importance of aquaculture in South Carolina is illustrated by the 2005 USDA Census of Aquaculture where the state ranked second in overall soft shell crab sales, sixth in Tilapia sales, and fourth in salt water shrimp sales for that year. In Charleston County, commercial aquaculturalist Bishop Farm carries a variety of products including Largemouth Bass, Bluegill, Redbreast Sunfish, Green Sunfish, Hybrid Striped Bass, Triploid Grass Carp, and Tilapia. In nearby Dorchester County, Cottage Farms and Natural Directions produce Channel Catfish, Tilapia, and Triploid Grass Carp. The value of aquaculture to the community of Mount Pleasant is exemplified by the Shem Creek shrimp fleet dubbed the “Heart of Mount Pleasant.” Charleston County further ranks second for horses, ponies, mules, burros, and donkeys, and fourth for vegetable production.

For each category of agricultural products, sales increased from 2002 to 2007. Sales in livestock, poultry, and their products more than tripled (212% increase) while crop sales increased 9.7%. The overall change in number of farms was a decrease, though some sectors experienced an increase such as poultry and eggs, milk and dairy, other animals, and horses, ponies, mules, burros, and donkeys.

Trends in Farming and Farmland

Table 2 and Figure 1 show trends in farm numbers and farmland acreage in Charleston County from 2002 to 2007. The number of farms decreased from 417 in 2002 to 332 in 2007, a 20% loss. Farmland decreased 12%. The biggest losses occurred in farms that are less than 10 acres. The only increase for Charleston County was in the average size of farms; it rose from 114 acres to 126 (+10.5%).

²¹ Aquaculture is defined by the USDA Census of Agriculture as the farming of fish, crustaceans, mollusks, and other aquaculture products. Farming implies some form of intervention in the rearing process, such as seeding, stocking, feeding, protection from predators, etc. Farming also implies individual or corporate ownership of the stock being cultivated, and harvesting is conducted in controlled environments, including ocean-raised fish (in pens, cages, etc.), and shellfish harvested from leased, owned, controlled, or managed beds.

²² 2007 Census of Agriculture.

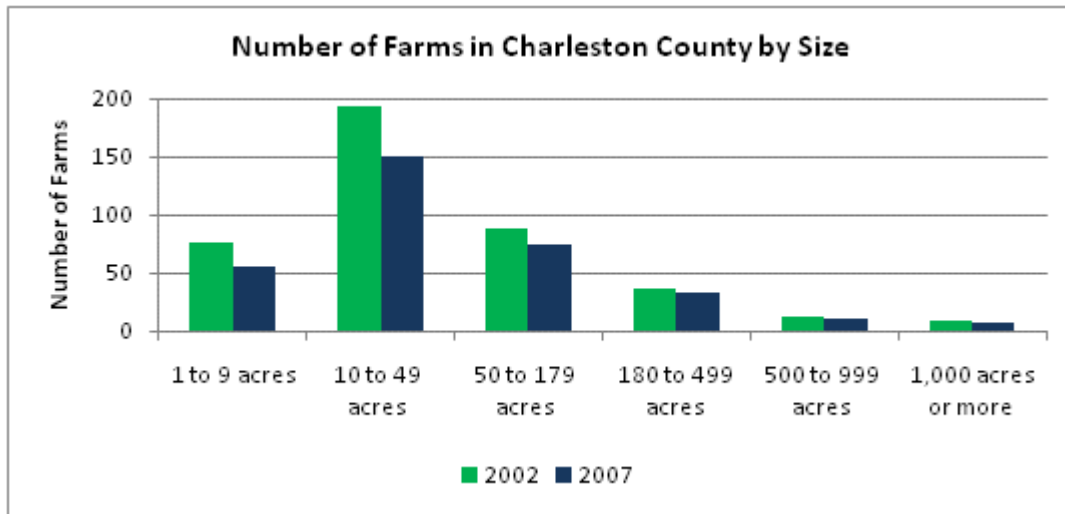
Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Table 2: Number of Farms and Farm Size in Charleston County				
Farm Size	2002	2007	Change	% Change
1 to 9 acres	76	56	-20	-26%
10 to 49 acres	193	150	-43	-22%
50 to 179 acres	89	74	-15	-17%
180 to 499 acres	37	33	-4	-11%
500 to 999 acres	13	11	-2	-15%
1,000 acres or more	9	8	-1	-11%
Total	417	332	-85	-20%
Acres in Farms	47,515	41,702	-5,813	-12%
Avg. Farm Size	114	126	+12	+10.5%

Source: USDA Census of Agriculture, 2007

Figure 1 below illustrates the pattern of farm loss.

Figure 1: Number of Farms in Charleston County by Size



Source: USDA Census of Agriculture, 2007

Farm and farmland loss in Charleston County echo the state trend. The entire state of South Carolina lost 43,416 acres of farmland (-0.9%) and 1,326 farms (-5%) between 2002 and 2007. These trends counter the national trend. Nationally the number of farms increased 3.6% from 2002 to 2007. The majority of this increase occurred in small farms; farms in the 1 to 9 acre category increased nearly 30%. Those in the 10 to 49 acres and 50 to 179 acres rose 10% and 0.3% respectively.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Aging of the Farm Population

According to the USDA, the average age of farmers has increased every year since 1978. The average age of all U.S. farm operators has been greater than 50 years of age since at least the 1974 census. Between 2002 and 2007 the national average increased from 55.3 years of age to 57.1 years of age.²³ In Charleston County, the average age of farmers in 2007 was 58.9 years, slightly above the state average of 58.5.²⁴

Definite relationships exist between age of farm operator and particular farm characteristics. For example, family farms typically have older farm operators than corporate farms, and farms in smaller income classes typically have older farm operators than larger income class farms.²⁵ With the concentration of small family farms in the region, it is not surprising that the average operator age in Charleston County is higher than the national average.

Opportunities in Local Markets

Despite national trends toward consolidation, other national trends demonstrate opportunities for small producers in local markets. Local markets present smaller producers in particular with increased market options, and they offer markets that are less vulnerable to global price fluctuations.

Market research from the National Restaurant Association, the National Grocers association, and research firms like the Hartman Group have identified “local” as one of the food attributes most highly valued by consumers nationwide and as a major trend affecting the food industry. The USDA has predicted that the market for locally grown food will reach \$7 billion in 2012.²⁶

ASAP’s 2007 study on the food and farming economy of the 23 counties of Western North Carolina quantified demand for locally grown fresh fruits and vegetables in the region at that time to be \$36 million per year and \$452 million for all locally grown foods. Consumer surveys conducted in 2011 demonstrate that interest in locally grown foods continues to increase in the region. Buying locally grown food is important because it supports local farms and the local economy, and for the majority of respondents, the availability of locally grown food is an important consideration when choosing a grocery store or a restaurant. Furthermore, the research demonstrates the importance of labeling local food and place-based messaging that ties local food to local community.

Since the release of the 2007 study, ASAP has done similar research for other regions in North Carolina, Tennessee, and South Carolina. The results have shown the same patterns of increasing demand for locally grown foods, and a desire by community members to support their local farms and local economies by purchasing locally grown foods. The results of a preliminary community survey conducted with residents of Charleston County also shows strong support for

²³*Farmers by Age, 2007 Census of Agriculture.*

²⁴2007 Census of Agriculture, County Summary Highlights, Charleston County.

²⁵ Robert A. Hoppe, P. Korb, E. O’Donoghue, D. Banker, *Structure and Finances of U.S. Farms: Family Farm Report, 2007 Edition.* June 2007. Economic Research Service, USDA.

²⁶USDA (May 24, 2011), *New USDA Rule Encourages the Purchase of Local Agricultural Products for Critical Nutrition Assistance Programs.* News Release No. 0180.11

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

conserving the region's farmland; residents identified the availability of locally grown food, scenic beauty, and recreational activity as top benefits of agriculture.²⁷

The 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 re-circulated within a local economy before leaving through the purchase of an import. According to the theory, consumer spending on local farm products generates a greater economic return than spending at corporate chains as farmers re-spend the money on products and services in their community.

There are many factors which influence the number of times dollars are thought to re-circulate, but LME's are commonly reported to range from 1.5 to 3.0. In 2007 direct sales of local farm products in Charleston County totaled \$1,052,000.²⁸ By LME theory, the total economic impact of this spending would be between \$1.6 million and \$3.2 million.

Consumer Food Spending and Consumption Figures for Charleston County

Consumer Spending

Based on the latest consumption estimates from the Bureau of Labor Statistics, residents of Charleston County residents spent over \$844 million on food in 2009.²⁹ The average household spent \$3,488 on groceries and \$2,539 on food consumed in other places. For Charleston County, where 350,209 residents equals 140,084 households, this figure breaks down into \$488,612,992 spent on food consumed at home and \$355,673,276 spent on food consumed away from home. A little less than three quarters of all away-from-home food spending typically occurs in restaurants.³⁰

Demand for local food and farm products will be a subset of these figures, though actual consumer spending on local food and farm products is difficult to calculate. The USDA collects limited data on sales from farmers to consumers and no data at all regarding sales from farmers to businesses, organizations, or institutions in specific geographic areas.

²⁷ An online (Survey Monkey) survey was conducted June 15, 2011-July 5, 2011. The purpose of this web survey was to gather community input on Charleston County's local food system. Appalachian Sustainable Agriculture Project conducted and analyzed the survey. The Mount Pleasant Planning Department publicized the survey through social media avenues and through targeted outreach. 147 respondents began the survey and 132 completed the survey for a response rate of 89.8%.

²⁸ 2007 Census of Agriculture.

²⁹ Calculations based on the *Food Guide Pyramid Servings Dataset*. Last Updated February 1, 2010. NASS, USDA. (accessed June 2011). Calculations use per consumer unit estimates for the South region of the U.S.

³⁰ Table 3 in Food Away from Home. Total Expenditures. Food CPI and Expenditures Briefing Room. Economic Research Service, USDA.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Consumption Estimates

Tables 3 through 5 show consumption estimates in different product categories in Charleston County. Table 3 beginning with Column 1 shows consumption estimates in pounds for selected fresh fruits and vegetables. Column 2 shows acreage needed to grow those amounts, and Column 3 shows how many acres were devoted to growing the crops in the county in 2007. Acreage data should not be considered exact. In some cases, the USDA suppresses county-level data; for example, when production is limited or only one or two farms report growing a particular crop. In other cases reported acreage may be higher than actual acreage because of formulas used by the USDA to create county profiles that are based on limited information.

Even with incomplete data, what is clear from Table 3 is that there is significantly more demand (consumption) than supply (production) for every type of fresh fruit and vegetable grown in the region except for blueberries and tomatoes. Achieving a level of supply equal to the level of consumption in this region (i.e., matching Column 3 with Column 2) is not realistic because it assumes year-round production of fresh fruits and vegetables. Rather, there is some point between Columns 3 and 2 that represents a practical target for local production in a fully mature local food system.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Table 3: Comparison of Consumption and Production of Selected Fresh Fruits and Vegetables Grown in Charleston County			
	Pounds consumed in Charleston County³¹	Acres need to produce that amount	Acres devoted to the crop in Charleston County
Apples	5,662,900	265	(D)
Raspberries	94,600	8	(D)
Blackberries	189,100	20	(D)
Blueberries	280,200	23	104
Cantaloupe	3,109,900	304	17
Grapes	2,987,300	344	24
Melons	577,800	56	-
Peaches	1,775,600	188	(D)
Strawberries	2,258,800	171	(D)
Watermelon	5,410,700	221	56
Beans	745,900	112	10
Broccoli	2,080,200	326	1
Cabbage	2,868,200	107	9
Carrots	2,826,200	124	-
Cauliflower	549,800	79	1
Corn (Sweet)	3,225,400	561	(D)
Cucumbers	2,360,400	171	10
Eggplant	301,200	11	2
Onion	854,500	3	(D)
Peppers (Bell)	3,449,600	324	(D)
Potatoes	12,852,700	794	(D)
Squash	1,460,400	49	20
Sweet Potatoes	1,761,600	113	4
Tomatoes	6,478,900	260	606
Total	70,444,600	5,201	988

Source: [Column 1] ERS/USDA Data Food Availability (Per Capita) Data System: Food Guide Pyramid (2010); [Column 2 and 3] USDA Census of Agriculture, 2007.

³¹ Consumption figures are rounded to the nearest hundred.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Table 4 shows meat, seafood, and dairy consumption in Charleston County. As with fruits and vegetables, consumption outpaces production for all types of meats. As a coastal community, meat production is not a primary focus of farms in the region. However, local farms specializing in grass-fed and artisanal meat products – e.g. Cordray Farms and Cypress Artisan Meat Share – use these niche markets to incorporate meat production into the local foodscape.

Ranked number one in the state for commercial fishing and aquaculture production, Charleston County fishermen regularly provide residents and businesses with fresh local seafood. This agricultural resource is one that separates Charleston County from more interior South Carolina counties. Marketing strategies focused on this area’s natural resource – for example, a local seafood label or an annual festival around local seafood–would provide a way for the region to distinguish its foodscape to residents and visitors and would provide farmers increased market opportunities.

Milk production for Charleston County in 2007 is estimated at 56,300 pounds. Some portion of that amount is marketed as fluid milk and some is used to make ice cream and other processed dairy products. However, no information is available from government sources detailing the end uses of milk produced in the county. Some small dairy farmers have focused on reaching niche markets with production of value-added products like artisan cheese, yogurt, butter, and goat’s milk, though the total amounts produced are very small.

Table 4: Consumption of Meat, Seafood, and Dairy in Charleston County		
*figures are rounded to nearest hundred		
	Lbs. Consumed in 2009	Lbs. Produced in 2007 (meat is slaughtered weight)
Beef	32,044,100	961,300
Chicken (broilers)	34,180,400	37,700
Pork	22,063,200	3,000
Turkey	6,163,700	(D)
Total Fish and Shellfish	5,603,300	-
Mollusks	-	326,000
Fluid Milk	62,722,400	56,300

Source: USDA Census of Agriculture, 2007, ERS/USDA Data Food Availability (Per Capita) Data System: Food Guide Pyramid

The artisan food market has grown in recent years because artisan foods embody the quality of authenticity and the desire by consumers to know where their food is coming from. Successful growth of artisan markets in Mount Pleasant will depend on the ability of producers to navigate local market opportunities and promote the community values associated with their products to consumers.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Table 5 shows the consumption of processed fruits and vegetables in Charleston County. With demand calculated at \$136.3 million for ready-to-eat foods, processing fruits and vegetables for local sale may be one way to expand local consumption of local farm products.

Table 5: Consumption of Selected Categories of Processed Fruits and Vegetables in Charleston County		
	Pounds Consumed in Charleston County (rounded to nearest hundred)	Equivalent Retail Spending (rounded to nearest hundred)
Processed fruits		
Canned apples/applesauce	1,544,400	\$1,312,700
Canned peaches	1,043,600	\$1,095,800
Apple juice	8,993,400	\$4,766,500
Frozen berries	1,190,700	\$3,822,100
Canned pears	795,800	\$835,600
Grape juice	1,733,500	\$1,213,500
Other processed fruits	27,855,600	\$50,140,100
Processed vegetables		
Canned tomatoes	23,874,500	\$18,383,400
Canned cucumbers (pickles)	1,261,200	* ³²
Canned snap beans	1,176,000	\$940,800
Canned carrots	341,100	\$303,600
Other canned vegetables	7,169,500	\$9,893,900
Frozen vegetables	27,072,000	\$43,585,900
Dehydrated vegetables	10,551,700	*
Total	114,603,000lbs	\$136,293,900

Source: ERS/USDA Data Food Availability (Per Capita) Data System: Food Guide Pyramid and *How Much do Fruits and Vegetables Cost?* (2008) ERS/USDA.

Local Production

There is an upper limit to the amount of produce retail food stores can source from regional growers based on climate and soil related limitations. Charleston County farmers could not supply 100% of produce to local retailers, because they cannot grow avocados or bananas for

³² The * in Table 6 indicates that data is unavailable.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

example, no matter how much local food infrastructure is improved. They can, however, grow each of the 39 different types of fruits and vegetables that accounted for 70% of produce sales in retail outlets nationwide in 2010. In Table 7 those 39 items are listed along with their corresponding share or percentage of total retail produce sales.

Farmers in coastal region of South Carolina can grow all of the items listed in Table 6, but some are limited to the months of the summer season and others to the winter season. Some items, like greens, can be supplied to local markets for more than four months and others for less. Based on the South Carolina regional produce availability calendar,³³ local farmers could grow 70 percent of the area's most popular retail produce items for 43 percent of the year, and therefore supply 30 percent of the total yearly produce purchases of residents (70% x 43% = 30%). Taking these variations into account, 30 percent represents a reasonable adjustment for the seasonality of production.³⁴

Table 6: Percent Share of Retail Produce Sales for Selected Fruits and Vegetables							
Fruits	% of Total Produce Sales in year		Vegetables	% of Total Produce Sales in year		Vegetables (continued)	% of Total Produce Sales in year
Apples	7.10%		Asparagus	1.40%		Greens	0.30%
Figs	<.1%		Beans	0.80%		Herbs	1.00%
Raspberries	1%		Beets	0.10%		Lettuce	2.20%
Blackberries	0.60%		Broccoli	1.70%		Onion	4.30%
Blueberries	2.10%		Cabbage	0.70%		Peas	0.30%
Cantaloupe	1.70%		Carrots	2.50%		Peppers (Bell)	2.60%
Grapes	6.40%		Cauliflower	0.60%		Potatoes	5.70%
Melons	0.70%		Celery	1.50%		Spinach	0.60%
Peaches	1.20%		Corn (Sweet)	1.20%		Sprouts	0.10%
Pears	1.10%		Cucumbers	1.70%		Squash	1.40%
Plums	0.60%		Eggplant	0.20%		Sweet Potatoes	1.00%
Strawberries	4.90%		Garlic	0.50%		Tomatoes	7.50%
Watermelon	2.40%		Green Onion	0.50%		Pecans	0.4%
<i>Column Totals</i>	<i>28.80%</i>			<i>13.40%</i>			<i>27.40%</i>
Total share of produce accounted for by fruits & vegetables that can be grown in Charleston County: 69.6%							

Source: The Packer

³³South Carolina Department of Agriculture's "South Carolina Produce Availability Calendar"
<http://agriculture.sc.gov/UserFiles/file/PDFS/harvestcalendar1108.pdf>

³⁴ The calculation of seasonality is based on the average growing season length for all fruits and vegetables in Table 7.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Summary of Local Market Potential of Locally Grown Food

This section calculates potential local food spending based on Charleston County consumption figures. The local potential spending figure assumes significant improvements to infrastructure and distribution systems for locally grown produce in addition to changes in tastes and preferences so that all residents in Charleston County choose to purchase local food when it is available. Though this figure takes into account the growing season of local produce, it does assume the use of practices like extending growing seasons, greenhouse production, and improved storage and processing techniques, to maximize production potential and meet local demand. These projections are grounded in measured consumption and production figures for Charleston County.

Table 7 shows potential retail spending on local produce and meat based on Charleston County consumption figures. The potential local retail spending figure \$32.7 million represents the economic impact to the region if local farms were to supply all of the artisanal meat and fresh produce needs of Charleston County during growing seasons.

	Total Consumption (lbs.) 2009	Total Retail Spending	Potential Local Spending
Fruits and Vegetables ³⁵	70,44,600	\$99,265,200	\$29,779,600
Meats (beef, chicken, pork) ³⁶	274,648,300	\$290,941,400	\$2,909,400
Total Retail Spending: \$390.2 million			
Potential Local Spending: \$32.7 million			

Source: The figures in the table are based on a series of calculations combining data from the 2007 Census of Agriculture, the ERS/USDA Data Food Availability (Per Capita) Data System: Food Guide Pyramid, and The Packer which provided the 2010 average price per pound for produce.

Local Spending Potential for Fruits and Vegetables

Local spending potential for fruits and vegetables of \$29,779,600 is calculated as total consumption multiplied by the average retail price per pound for each of 39 types of fruits and vegetables multiplied by the 30% seasonality multiplier. The total, \$29,779,600, is the potential retail spending by Charleston County residents for the 39 fruits and vegetables grown in the region. (70,444,600 lbs of produce x \$/lb for each type of produce x 30% = \$29,779,600 spending).

³⁵ Estimates are based on the calculations presented in Table 5 and come from the ERS/USDA Data Food Availability (Per Capita) Data System: Food Guide Pyramid and USDA Census of Agriculture, 2007.

³⁶ Ibid.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Local Spending Potential for Meat

Local potential spending for meat (beef, chicken, pork) of \$2,909,414 is calculated as total consumption multiplied by the average retail price per pound of each meat. Local meats represent approximately 1% of this total.³⁷ \$2,909,414 represents the maximum retail spending potential for locally raised meat in the region. (274,648,300 lbs of meat consumed x \$/lb for each type of meat x 1% = \$2,909,414 spending).

Combined Spending Potential

An important note about local potential spending detailed in this section is that there are significant types of infrastructure improvements needed to achieve these dollar figures. For example, moving fresh produce from farm to market may require refrigerated trucks and storage facilities; moving meat from farm to market will require those things plus local facilities for processing the food. To achieve maximum access to the 39 fruits and vegetables, creative innovations will need to be instituted like extending crop seasons, developing storage techniques, utilizing alternative indoor growing methods, and developing a system for turning local fresh produce into processed product (e.g. apples into applesauce or tomatoes into salsa). The \$32.7 million figure should be regarded as a long-term goal linked to substantial changes in local food production and distribution systems plus increased spending linked to increased interest in local food.

Part II: Key Recommendations for the Town of Mount Pleasant

This section provides a set of recommendations for actions and policy that local government can utilize in an effort to bolster the local food system. It is meant for land use planners and government officials and includes descriptions of various land-use actions and community projects which have proven effective in supporting local food economies around the country. Several sources of information were used to develop this list of recommendations. The foremost of these sources are:

- An online community food survey of Charleston County residents. The purpose of the web survey was to gather community input on The Town of Mount Pleasant's local food system. 147 community members participated and gave their opinions on the topics of: defining local; benefits and negatives of agriculture; qualities of local food and local food purchasing habits; opinions on how best to promote farms and farmland in Charleston County.
- American Farmland Trust. This organization, which was founded to preserve farmland and ranchland in the United States, routinely publishes lists of local policies that have been enacted around the country to support local agriculture.
- The National Association of Counties has collected examples of local policies in practice around the country enacted to support local food campaigns.

³⁷Large corporate livestock and poultry operations in the region are not likely to convert their production to support local market sales. Instead, smaller operations with greater infrastructure flexibility are likely to supply local markets. According to a report published by the USDA the percent of livestock operations that tend to target direct markets is about 1%. *Small Scale US Cow-calf Operations*, April 2011. USDA, Animal and Plant Health Inspection Service, Veterinary Services, National Animal Health Monitoring System.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

- The Leopold Center for Sustainable Agriculture is a leader in research on sustainable agriculture. Various case studies on the effects of local food policies were used to determine the best and most successful policies that support local food campaigns.
- The American Planning Association website has several resources for planners including their Policy Guide on Community and Regional Food Planning, Essential Info Packet on Food Systems Planning, and A Planners Guide to Community and Regional Food Planning: Transforming Food Environments, Facilitating Health Eating among others.

A number of key areas of opportunity have been identified as possible sectors for action. The recommendations listed are options and some are more easily implemented than others. Given community priorities and resources, stakeholders in Mount Pleasant will decide which recommendations are appropriate for implementation. Each recommendation is explained in greater detail in the sections that follow. References and resources for further information on each topic are provided at the end of the report:

- Tourism and Agriculture
- Local Food Guides
- Local Branding and Certification Programs
- Experiences around Local Food
- Farm to Chef Programs
- Farmers Market Technology
- Local Food Purchasing Policy
- Current Regulations
- Comprehensive Farmland Plan
- Agricultural Zoning District
- Urban Garden District Zoning
- Purchase of Agricultural Conservation Easements (PACE)
- Transfer Development Rights
- Taxes
- Food Policy Council
- Foster Collaboration around Shared Goals

Tourism and Agriculture

The Town of Mount Pleasant and the Charleston area are major national destinations for tourism due to their historic significance, scenic beauty, southern heritage, and regional cuisine. Visitors spend an estimated \$200 million annually on food and beverage, signifying a tremendous opportunity for efforts geared around promoting and further developing the region's local food and farm economy.

There are opportunities for the tourism industry to benefit from promoting food and farm tourism in the region. Sweetgrass and sweetgrass baskets are presently an area of focus due to community activism and local governmental support; these same types of efforts can also be directed to local food and farm products. There may be a need for expanded or different market promotion among tourists, encouraging them to visit area tailgate markets and farms. Increasing the variety and quantity of processed farm products for direct sale is another way to include tourists in the Local Food Campaign.

An important step in the development of farm tourism in the area is currently being accomplished through the Cultural Landscape District of Mount Pleasant. The district promotes the rural landscapes that make up Boone Hall, Hamlin Farms, Palmetto Fort, and the Sweetgrass Basket Overlay District areas, recognizing the area's traditional landscapes draw in residents and

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

tourists and connect the Town with its agricultural roots. Expanding this initiative to include local small farms, farmers markets, and fishing operations is an important next step.

Mount Pleasant in particular has an opportunity with its shrimp and seafood industry. As the United States imports more and more of its seafood, tourists have begun to seek out coastal vacation destinations so that they can have authentic seafood experiences. The Recreation, Travel and Tourism Institute at Clemson University and Gulf & South Atlantic Fisheries Foundation's *South Carolina: "Sea" the Difference* brochure (http://www.clemson.edu/centers-institutes/tourism/documents/Shrimp_B2.pdf) is a good model of a promotional campaign aimed at uniting the seafood industry with tourism.

Impact of Food-Related Tourism on the Local Economy

Actively promoting local food products to tourists through farm tourism, food festivals, and farmers markets is one way to keep visitor dollars circulating within the local economy. Over 4 million³⁸ visitors travel to Charleston County each year and spend on average \$50 a day on food and beverages.³⁹ This equals an estimated \$200 million per year in spending. If 5% of these sales came from the purchase of locally-produced products it would mean an extra \$10 million benefiting local farms and businesses in the area. In reality the impact could be even higher. The 2011 Charleston Food and Wine Festival alone brought in nearly \$7 million, a \$2 million increase from the previous year.⁴⁰ As the Mount Pleasant local food economy develops the area can expect to retain a larger percentage of tourist food dollars within the local economy. The Town of Mount Pleasant currently plays host to many lucrative food festivals like the Sweetgrass Cultural Arts Festival, the Blessing of the Fleet and Seafood Festival, as well as the upcoming Big Shrimp'N Festival. Maximize the impacts of these events on the local food economy by emphasizing the cultural themes and foodways traditional to the Lowcountry region.

Local Food Guides

As a strategy, local food guides connect farms and consumers and provide consumers with a way to act on their desire to buy locally grown food and support local farms. At the same time, a guide validates local agriculture, raises awareness, and draws more people to the cause. Over time the success of the guide can be used to better craft communications around local food and farms to fit the community. To develop a Local Food Guide for the Town of Mount Pleasant and Charleston region, local government can identify community partners and collaborators and work to locate funding.

Local Branding and Certification Programs

Labeling is important both because it allows consumers to act on their preference for locally-grown food and it allows any price premiums associated with the food to accrue to producers. Local branding is a way to add value to local farm products and provide farmers with a means to

³⁸2011 Office of Tourism Analysis, College of Charleston.

³⁹*Charleston Region Economic Profile 2009/2010*. 2010. Charleston Metro Chamber of Commerce.

⁴⁰ 2011 Annual Report: BB&T Charleston Wine and Food Festival. http://www.charlestonwineandfood.com/wp-content/uploads/2011_annualreport.pdf.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

increase their marketing power to compete more effectively with non-local items in the marketplace. Research shows the willingness of consumers to pay more for local food and the significance of informational labels to identify locally produced products.

In Mount Pleasant and the Charleston County region, there are opportunities, with seafood for example, to develop local food labels that will distinguish the region's local food scene and increase market opportunities for farms. In the community survey, residents of Charleston County noted their reasons for purchasing local food: it supports their neighbors and local economy (74%); it tastes better (43.3%); and to know where their food comes from (45.7%). A local branding program for the region should clearly communicate these values.

Experiences around Local Food

With the growth of the local food movement, there has been increasing interest by institutions including schools, hospitals, and colleges in providing fresh, local options to students, staff, patients, and employees. While these market segments can provide farmers with increased marketing options and be integrated into an overall strategy of market diversification, institutional market settings like schools and hospitals in particular provide opportunities to highlight the connections between food, food access, and health; nurture healthy eating habits in kids and families; and over the long term build support and appreciation for local farms and food. Schools and hospitals, because they reach broad constituencies and reach across socioeconomic and other cultural lines, provide opportunities to increase the distribution of fresh, local food to vulnerable children and families.

Taking a longer view of the development of the local food system, implement strategies that promote positive experiences with local food and farms. Children and adults that have positive experiences with local farms and food develop a deeper appreciation. Research from the health sciences demonstrates that food habits and preferences are directly impacted by positive and negative experiences. Preferences for food develop in positive contexts and aversions to foods develop in negative contexts. Positive experiences influence the formation of eating habits and preferences, create healthier individuals and communities, and develop local food and farm advocates.

Local government can support farm to school and farm to hospital programs by investigating the different ways in which local schools and hospitals can purchase local food while staying within federal (for schools) or company regulations. Local government could then organize a way to disseminate this knowledge to foodservice directors. Local government can further support farm to school programs by encouraging schools that have future construction plans to consider a facility that is capable of producing meals from fresh local ingredients. Public school boards and county commissioners can endorse procurement practices to purchase from farms within their region. County resolutions can support the proposals of leadership groups like the South Carolina Food Policy Councils that assist in making connections between farmers, schools, and hospitals. Local schools and hospitals can begin buying from local farms at a minimal level – featuring one locally sourced ingredient per month on menus, for example – and increase their purchases over time. Local food served by school and hospital foodservices can be integrated into health and wellness education, and local food and farm promotions in cafeterias will provide meaningful connections to local farms.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Farm to Chef Programs

The Town of Mount Pleasant has a vibrant independent restaurant sector and increasing interest by chefs in sourcing fresh, local food. In developing the region's local food economy, a next step would be to deepen connections between local farms and restaurants. Efforts might include a farm to chef promotional campaign to highlight the efforts of restaurants sourcing local ingredients and farm fieldtrips for chefs and farmer-buyer meetings to help facilitate relationship building. A farm to business trade directory can provide a practical means for farms to market their products and for restaurants to source local ingredients and advertise the local products they are interested in finding. A directory can also provide farmers and food businesses with the means to post business requirements and mitigate potential misunderstandings and frustrations. The combination of these activities will simultaneously connect local farms to this market sector, increase the visibility of local food in the community and build awareness, and provide farmers and chefs with practical information about how to build business relationships that last.

Farmers Market Technology

Helping farmers markets overcome the hurdles of accepting Electronic Benefit Transfer (EBT)⁴¹ for Supplemental Nutrition Assistance Program (SNAP)⁴² simultaneously draws new customers into purchasing local food while giving greater access to neighborhoods with low food security. While the Mount Pleasant Farmers Market currently accepts Senior Farmers Market Nutrition Program (SFMNP)⁴³ senior checks and Women, Infants, and Children (WIC)⁴⁴ vouchers, it does not participate in the more prominent EBT for SNAP programs. The paper vouchers of the SFMNP and WIC programs require less technical infrastructure and are therefore more easily used in local markets. By contrast EBT, the system used to accept SNAP benefits, requires point of sale equipment, electricity, and staffing, and farmers markets and produce stands do not typically have the funds or infrastructure needed to establish EBT points of sale. Local governments can help by subsidizing these initial costs.

Alongside efforts to institute SNAP benefits technology at markets, it will be crucial to promote the availability of that technology to potential users. Eligible consumers need to know they can use their benefits at specific farmers markets. Outreach efforts to low income communities can, for example, conduct campaigns in schools and through local media. Promotional programs can use coupons to provide potential customers with an incentive to visit farmers markets. Cooking demonstrations at markets or in areas of low food security with fresh, seasonal ingredients are a

⁴¹ Electronic Benefit Transfer (EBT) is an electronic system that automates the delivery, redemption, and reconciliation of issued public assistance benefits. EBT is currently used in all 50 states, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam.

⁴² Supplemental Nutrition Assistance Program (SNAP) is a program administered by the USDA, formerly known as food stamps. SNAP provides monthly benefits to eligible low-income families that can be used to purchase food.

⁴³ Senior Farmers Market Nutrition Program (SFMNP) is a program that provides low-income seniors with coupons that can be exchanged for eligible foods.

⁴⁴ The Women, Infants, and Children (WIC) program provides Federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

means to engage low income (and all) participants with unfamiliar ingredients and address the loss of cooking skills.

Local Food Purchasing Policy

Local food purchasing policies are a way for local governments to lead by example in supporting local food and farms. A local food purchasing policy involves making a commitment to use local food in government foodservice. This kind of policy promotes economic vitality by giving local producers a steady buyer, and it supports the health of employees and citizens by providing them with access to fresh, local foods.

The involvement of local government in food purchasing policies can range from minimal to highly engaged. A conservative commitment might showcase one catered meal per month that is made entirely from locally grown foods. A larger commitment might include spending a percentage of the annual foodservice budget on locally sourced ingredients. Local food purchasing policies show that community leaders, like the citizens they serve, value local farms and local food.

Current Regulations

Every community and farming operation is unique and will present different opportunities for local government to create a supportive atmosphere for farming. Planning regulations can be modified to allow farm businesses to adapt, innovate, and grow. An important first step is to review regulations already in place that may be hindering the production or sale of locally produced farm products. For instance, regulations restricting or prohibiting the use of seasonal or directional farm signs hinders farm businesses. The local Agricultural Issues Advisory Committee has been working for over a year to address this issue with the introduction of the Tourist Oriented Directional Signage Program bill. Legislators should also make sure that terms like “agriculture,” “farm,” “farm stand,” and “agricultural structure” are clearly defined in zoning regulations helps avoid ambiguity and confusion. Other regulatory barriers to review include:

- the limitations placed on the size and height of farm structures
- zoning laws that restrict the expansion of farms or their ability to develop new commercial enterprises
- the permitting process for farms to participate in seasonal events
- keeping livestock and other animals (chickens, bees) in urban spaces
- the requirements necessary for farmers to illustrate that their activities are exempt from wetland restrictions.

Actively including farmers in the decision-making processes will identify additional barriers and promote a participatory process.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Comprehensive Farmland Plan

Many communities develop ‘comprehensive plans’ to maintain the rural character of local landscapes and discourage the development of open space. A comprehensive farmland plan specifically addresses the vital economic role of agriculture for a region. Plans examine a region’s food system and focus on economic development strategies that support farming, maintain farmland, promote regulated growth, and protect natural resources.⁴⁵

A comprehensive plan to conserve farmland should: provide a clear description of the agricultural characteristics and trends of the region; provide clear goals and objectives for farmland conservation efforts; anticipate the needs of local producers, consumers, and markets concerning agriculture, and discuss options for supporting these sectors; take into consideration the environmental implications of farming in the region and support sustainable practices; promote the retention and addition of farm operators; support urban agriculture where applicable; be flexible enough to allow for new opportunities when they arise such as a specific application to support agritourism.

A thorough comprehensive farmland plan should incorporate all sectors of the farming community from producers to buyers to consumers. This strategy specifically allows for citizen participation and creates the basis for an integrated system. The implementation of a good farmland plan will entice participation by creating a stable environment in which agriculture and related businesses can operate.

Agricultural Zoning District

86.3% of participants in the Charleston County community survey noted that they were concerned local farmland would be developed for non-farm use. When asked what actions should be taken to prevent this, the number one response was “zoning restrictions.”

Agricultural zoning affords many advantages to producers. Zoning is inexpensive to implement but can keep land affordable for farming purposes. Zoning can reduce the likelihood of conflicts between farmers and their neighbors by keep incompatible development away from farm borders. Zoning can help simplify the regulatory process for buildings associated with agricultural operations and is easy to modify if conditions change. Some farmers may worry that zoning laws will result in a loss of freedoms but studies show that agricultural zoning promotes both farms and farmers’ rights.

There are some weaknesses to agricultural zoning, the foremost of which is that it is not permanent. Rezoning and upzoning often open up large areas of agricultural land for development. On a day-to-day basis, zoning is hard to monitor and enforce. In the long run however, agricultural zoning protects a region’s best farmland and keeps land affordable for farmers while promoting agricultural uses.

⁴⁵ American Farmland Trust: Planning for Agriculture. <http://www.farmland.org/services/p4a/default.asp>.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Urban Garden District Zoning

Urban gardens are an effective tool for increasing the visibility of local food production and boosting community awareness of local food. To encourage local food growth in the heart of Mount Pleasant, zoning codes and plans should support urban agriculture and urban gardens. Urban garden districts ensure that urban agricultural areas are protected and appropriately located to meet needs for local food production, community health, and community education. An agricultural zoning district provides opportunities for farms to use, for example, promotional and directional signage not allowed in other zoning districts. Zoning codes should address the safeguarding of green spaces and make appropriate vacant land and private property available for community gardening use. Farm animal and bee ordinances can allow small livestock operations and beekeeping in residential districts. Any regulations that impede urban farming/gardening should be examined and where appropriate modified or eliminated.

Purchase of Agricultural Conservation Easement (PACE)

Local governments can set up agricultural preservation boards like the Mount Pleasant Land Conservancy to participate in the purchase of agricultural conservation easements. Conservation easements refer to the process whereby a landowner places a voluntary deed restriction on their land by selling it to a government or private conservation agency. While the landowner retains ownership of the land, the deed permanently prevents the land from being developed for non-agricultural purposes. Conservation easements allow landowners to retain property rights, and owners can continue to farm on their land however they choose. The land can be sold or passed on to heirs as long as the future owners strictly follow the terms of the easement. PACE are often attractive to farmers because they are voluntary and provide cash.

There are downsides to PACE. First, it is expensive for organizations to purchase land through easements, and it is difficult to protect enough land to eliminate development pressure on unrestricted farms. Purchasing easements is time consuming and usually comes with many eligibility requirements. Lastly, the monitoring and enforcement of easement terms requires a large investment in time, resources, and money. To help reduce the burden on the Mount Pleasant Land Conservancy, local government could partner with local farmland trusts or state government to expand the funding and resource base.

Transfer Development Rights

Transfer of Development Rights (TDR) are established by zoning codes. Landowners use TDRs to transfer the right to develop a certain parcel of land to another parcel of land.⁴⁶ If the development rights are transferred from a piece of farmland, then that farmland becomes restricted with a permanent agricultural conservation easement. The appeal of a TDR is that the developer who buys these rights is usually allowed to develop at a higher density in the new location than is allowed for in the zoning codes.

⁴⁶American Farmland Trust.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

In general, owning a piece of land gives one the right to use it for whatever purpose they choose—farming, mining, building, etc. However, by using a TDR, the farmer selling the rights transfers this privilege to the “receiving” parcel.⁴⁷ In this way, the farmland is protected from ever coming under a different use, and developers get the benefit of added opportunities in their construction efforts.

Taxes

Like zoning, tax incentives are a powerful tool in the local government’s toolkit. There are three types of incentives that can be used to assist farmland preservation in South Carolina: sales tax, estate tax, and property tax.

Sales tax exemptions have been used in places like North Carolina to help farmers purchase certain high dollar items for their operations like heavy machinery, storage containers, fertilizer, and fuel for considerably less money. Often times, smaller family farms are driven out of business by the prohibitively high costs of farm inputs. Not having to pay sales tax for some of these big ticket items eases the financial burdens of farming for smaller farms.

Estate tax incentives involve the donation or sale of an agricultural conservation easement to reduce the value of land. For qualifying working farms, restricting the value of land leads to lower taxes. In some cases, it is possible for an easement to reduce the value of land to below a taxable level. To stay profitable, farms must either reduce costs or increase yield, and estate tax incentives are a viable way to accomplish the former.

Property tax incentives can be achieved through differential assessments or “greenbelt laws.” In this way, a parcel of land is taxed based on its value for farming rather than its market value for development. This rate is usually much lower than the fair market value. In South Carolina, the agricultural use value rate is 4% for individually owned farms.⁴⁸

Differential assessments, unlike sales tax and estate tax incentives, have marked disadvantages. For instance, if a piece of farmland that has been taxed at its use value for farming is sold or is no longer used for farming, the owner is responsible for the rollback penalty of the deferred taxes plus interest for the five years preceding purchase or discontinuation of farming.⁴⁹

⁴⁷American Farmland Trust.

⁴⁸American Farmland Trust.

⁴⁹Rodney L. Clouser, “Issues at the Rural-Urban Fringe: Methods to Sustain Agricultural Land -- Use-Value Assessment,” *University of Florida ISAF Extension*. Publication #FE553.2009.
<http://edis.ifas.ufl.edu/pdffiles/FE/FE55300.pdf>

Cost of Community Services (COCS) Studies

The American Farmland Trust research division conducts fiscal analyses that focus on the way different types of land use affect local government taxation and spending. Nearly 20 years of data show that residential development is a fiscal net loss for communities (traffic congestion, water and air pollution, increase in demand for costly public services). Farmland on the other hand often generates a fiscal surplus that helps offset the deficit created by residential demand for public services.

There is a common misconception among local development planners that open land should be developed for its “highest and best use,” that agricultural lands receive unfair tax breaks, and that residential development will lower property taxes by increasing the tax base. Results from COCS studies show that, based on cost per dollar of revenue raised to provide public services to different land uses, commercial and industrial development are the least costly form of development (median cost per dollar: \$0.29) followed closely by working and open land (median cost per dollar \$0.35). Residential development comes in at a distant third (median cost per dollar \$1.16). In other words, when considering development plans, planning departments should note that preserving farmland and open space is often a profitable strategy in the long run.

For a list of the results from all American Farmland Trust COCS studies, refer to:
http://www.farmlandinfo.org/documents/27757/FS_COCS_11-02.pdf

Food Policy Council

Food Policy Councils assess the needs of individual communities to achieve community food objectives and facilitate the collaboration of various social and governmental groups representing diverse special interests of particular regions or states. The South Carolina Food Policy Council (established in 2006) provides an opportunity for local stakeholders of the food, health, and agricultural sectors to collaborate on issues related to the future sustainability of South Carolina’s food and farming system. The South Carolina Food Policy Council delivers annual reports which focus on strategies for improving the South Carolina food system’s impact on public health, the environment, education, and the state economy. The most recent 2010 report *Sustainable South Carolina Local Food Systems Report* focuses on economic and farm sustainability issues, health, food access and equality issues/solutions, environmental sustainability and stewardship, and food safety.

In the community food survey, Charleston County residents identified the preservation of local food and farms a top priority with 95.1% of respondents indicating that they believe the community needs to do more to preserve farmland. To achieve this goal, local government in Mount Pleasant can assume the role of collaborator by relaying the needs of the local community to the South Carolina Food Policy Council and then working with the council to instigate change. The South Carolina Food Policy Council has the connections and resources available to assist local government in securing measures to preserve farmland, make locally produced foods more accessible to residents, and promote infrastructure improvements to help local producers become more competitive in local markets.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Foster Collaboration around Shared Goals

New partnerships need to be formed, relationships expanded, and roles clarified in order to further food system localization efforts. The agenda of the local food movement is 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 farm worker 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. As a first step, engage in an asset mapping and community visioning process. Asset mapping identifies the resources and stakeholders in the community relevant to the process of rebuilding community based food systems. Community visioning engages key stakeholders in a process that defines community strengths, needs, shared priorities, and most importantly begins to build relationships across community sectors and potential future collaborations. Combined, these strategies of engagement encourage community participation and buy-in, and in establishing common goals, allow stakeholders to invest more fully in effective actions that complement the actions of other stakeholders.



Funding for the work reported here was provided by the USDA Sustainable Agriculture Research and Education Program.

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

Appendix A.

Current Food and Farm Legislation in South Carolina

1. South Carolina Conservation Easement Enabling Statutes: SC; State Laws; S.C. Code Ann. §§ 27-8-10 to 27-8-80 (2004).
2. South Carolina Differential Assessment Statutes: SC; State Laws; S.C. Code Ann. §§ 12-43-220, -230, -232 (2005). (*Current Use Value*)
3. South Carolina Donated Easement Transferable Tax Credit Statute: SC; State Laws; S.C. Code Ann. § 12-6-3515 (2006).
4. South Carolina Food Policy Council By laws: SC; State Administrative Regulations/Guidelines; South Carolina Food Policy Council, By-Laws (2006).
5. South Carolina House Bill 3159 (2011): SC; Legislative Updates; H.B. 3159, 119th Gen. Assem., 1st Reg. Sess. (S.C. 2011). (*South Carolina Conservation Bank*)-in process
6. South Carolina House Bill 3179 (2009): SC; Legislative Updates; H.B. 3179, 118th Gen. Assem., 1st Reg. Sess. (S.C. 2009). (*Farm to School Act*)- in process
7. South Carolina PACE Enabling Statutes: SC; State Laws; S.C. Code Ann. §§ 48-59-10 to 140 (2004). (*Establishment of the South Carolina Conservation Bank Act*)
8. South Carolina Right to Farm Enabling Statutes: SC; State Laws; S.C. Code Ann. §§ 46-45-10 to 46-45-70 (2004).
9. South Carolina Senate Bill 1075 (2010): SC; Legislative Updates; S. 1075, 118th Gen. Assem., 2nd Reg. Sess. (S.C. 2010). (*Conservation easements*)

Appendix B.

Further Reading and Resources

American Farmland Trust: Saving the Land that Sustains Us

The American Farmland Trust is a pioneer in research, policy guides, and politics related to agriculture and food economies. Their website contains a section called *Growing Local* which is dedicated to information and resources relating to the national local food movement. In it you can find resources from newspaper articles, case studies, policy recommendations, published reports, personal stories, and more.

<http://www.farmland.org/programs/states/SC/default.asp>

<http://www.farmland.org/programs/localfood/default.asp>

Particular attention should be paid to a report entitled *Planning for Agriculture in New York: A Toolkit for Towns and Counties*. This 2011 report includes elaboration of many of the recommendations made in ASAP's report, as well as a helpful checklist for determining whether or not your local government is planning a future for farms.

<http://www.farmland.org/documents/PlanningforAgriculturePDF.pdf>

American Planning Association's Policy Guide on Community and Regional Food Planning

This policy guide links to several policy guides previously adopted by the APA, among them sustainability, smart growth, energy, water resources management, solid and hazardous waste management, housing, and farmland preservation. In some of these policy guides, elements of the food system are specifically recognized. In others, even though not mentioned, they have a place.

<http://www.planning.org/policy/guides/adopted/food.htm>

Leopold Center for Sustainable Agriculture

The Leopold Center is a research and education center located at Iowa State University. It was established in 1987 with a mission of conducting research to assess the negative impacts of agricultural practices, assist in developing alternative practices, and to inform the public of their findings. The Leopold Center provides cutting edge research and case studies that are meant to foster sustainable agricultural practices both in Iowa, and nationwide. Their published papers and other resources can be found at their website:

<http://www.leopold.iastate.edu/index.htm>

National Association of Counties (NaCo)

NACo is the only national organization representing county government. Their website provides information on the activities of counties around the country. It also provides resources, products, and services for local government officials to assist them in their local missions. This includes resources on county level policy recommendations for supporting local food movements, as well as examples of plans that have been implemented by various counties in the US.

<http://www.naco.org/about/who/Pages/default.aspx>http://www.farmtoschool.org/files/publications_133.pdf

Appendix C.

Examples of the Recommendations from Around the Country

1. Food Policy Council

- *South Carolina Food Policy Council By Laws*
<http://agriculture.sc.gov/UserFiles/file/Food%20Policy%20Council/By-laws%20-%202007.pdf>
- *Knox County Food Policy Council By Laws* <http://www.food-matters.org/pages/knoxctybylaws.htm>

2. Local Food Purchasing Policy

- *Albany County, N.Y., Resolution No. 496-a (Feb. 9, 2009)*http://www.farmlandinfo.org/documents/37953/Buy_Local_Law_Albany_County_%283%29.pdf
- *Woodbury County Policy for Rural Economic Revitalization*
<http://www.agobservatory.org/library.cfm?refID=96615>

3. Comprehensive Farmland Preservation Plan

- *Burlington County Comprehensive Farmland Preservation Plan (2009-2018)*.http://www.co.burlington.nj.us/upload/Resource_Consevation/Images/BCCFP_P_EntireDoc.pdf
- *County of Mercer Comprehensive Farmland Preservation Plan 2007*
http://www.state.nj.us/counties/mercer/community/pdfs/farm_masterplansadc.pdf

4. Agricultural Protection Zoning

- *Clallam County Zoning Code*
<http://www.clallam.net/RealEstate/assets/applets/AgCodesections.pdf>
- *How Well Has Agricultural Protection Zoning Worked? By Joel Russell*
<http://www.joelrussell.com/articles/Prac%20Plan%20Ag%20zoning.pdf>

5. Urban Garden District Zoning

- *Cleveland's Zoning for Urban Agriculture and Green Space*
<http://planning.city.cleveland.oh.us/zoning/pdf/AgricultureOpenSpaceSummary.pdf>
- *Gainesville Florida Community Garden Program*
<http://www.cityofgainesville.org/GOVERNMENT/CityDepartmentsNZ/NatureOperationsDivision/CommunityGardens/tabid/183/Default.aspx>

6. Purchase of Agricultural Conservation Easement (PACE)

- *Mount Pleasant Land Conservancy* <http://www.mountpland.org/easements>
- *Lancaster County, PA Farmland Conservation Easement Program*
<http://www.co.lancaster.pa.us/lanco/cwp/view.asp?a=371&Q=384772>

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

7. Transfer Development Rights

- *King County, Washington Transfer of Development Rights (TDR) Program*
<http://www.kingcounty.gov/environment/stewardship/sustainable-building/transfer-development-rights.aspx>
- *West Virginia Code §7-1-3mm. Transfer of development rights in growth counties*
<http://www.legis.state.wv.us/WVCODE/ChapterEntire.cfm?chap=07&art=1§ion=3MM#01>

8. Taxes

- *North Carolina Department of Revenue Application for Exemption Number for Qualified Purchases* <http://www.dornrc.com/downloads/sales.html>
- *The South Carolina Sales and Use Tax Act*
<http://www.scstatehouse.gov/code/t12c036.htm>

9. Current Regulations

- *American Farmland Trust's Planning for Agriculture: A Guide for Connecticut Municipalities*
<http://www.ctplanningforagriculture.com/pdf/Addressing%20Common%20Issues.pdf>

10. Farmers Market Technology

- *Resolution in Support of Improved Food Access and Education in Jefferson County*
<http://media.al.com/bn/other/JC%20BOH%20Food%20Access%20Resolution%20final%2011'3'10.pdf>

11. Tourism and Agriculture

- *Charleston Wine + Food Festival*
<http://www.charlestonwineandfood.com/events/wadmalaw-farm-to-table-excursion/>
- *Appalachian Sustainable Agriculture Project's annual Family Farm Tour*
<http://www.asapconnections.org/thefamilyfarmtour.html>

12. Local Food Guide

- *Appalachian Sustainable Agriculture Project Local Food Guide (online)*
<http://www.buyappalachian.org/>
- *Lowcountry Local First: Farm Fresh Food*
http://www.lowcountrylocalfirst.org/farm_fresh_food

13. Local Branding and Certification Programs

- *Appalachian Grown™ Producer Certification and License Agreement from Appalachian Sustainable Agriculture Project*
<http://www.asapconnections.org/ProducerCertification.pdf>
- *Certified South Carolina* <http://www.certifiedscgrown.com/Certified>

Appalachian Sustainable Agriculture Project (ASAP)
Food and Farm Assessment: Mount Pleasant, South Carolina

14. Positive Experiences Around Local Food

- *Appalachian Sustainable Agriculture Project Farm to Institution resources*
<http://www.asapconnections.org/farmtohospital.html>
- *Monterey County Farm to School Partnership* <http://www.farmtoschool.org/state-programs.php?action=detail&id=4&pid=21>

15. Farm to Chef

- *American Farmland Trust's Lowcountry Farm to Chef Project*
<http://www.farmland.org/programs/states/sc/SCFarmtoChef.asp>
- *Northwest Ohio Fresh Network*
http://ciftinnovation.org/images/stories/nofn_2011_directory.pdf

16. Market Research Study

- *The Leopold Center for Sustainable Agriculture's Market Research Feasibility Studies* <http://www.leopold.iastate.edu/research/topics/market.html>