

Technical Report
***Livingston County Agricultural
and Farmland Protection Plan***

SUBMITTED TO:

Livingston County Agricultural and Farmland
Protection Board
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Acknowledgements

The Livingston County Agricultural and Farmland Protection Board commissioned ACDS, LLC to create an Agricultural and Farmland Protection Plan that will foster farmland stewardship and encourage economic growth and enterprise development within Livingston County's agricultural industry while supporting and enhancing county and local efforts to preserve and protect farmland. Those involved in the project include:

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Executive Summary

Introduction

The purpose of this project is to analyze and understand the foundations of Livingston County's agricultural economy and to create an Agricultural and Farmland Protection Plan that will fulfill both the requirements of the Agriculture and Markets Law 25-AAA and create recommendations for structural economic development programming to ultimately enhance the future of local agriculture.

The project output is intended to encourage long-term policy formation in support of agriculture while providing a specific short-term framework to guide local programs regarding specific agricultural economic development and land use initiatives.

To accomplish this, the ACDS and American Farmland Trust (AFT) study team gathered published data for Livingston County and the surrounding region to assess current conditions. This data was reaffirmed by interviewing 64 farmers, agribusinesses, entrepreneurs, service providers, public officials, and community leaders. In addition to interviews, the study team sent a survey to town officials to assess on-the-ground land use conditions.

The result of the process is a series of findings relative to agricultural business and land use conditions. As well, the study team has made 13 recommendations for action to improve these conditions in advancement of both the agricultural industry and local communities.

Findings

Agriculture in Livingston County, New York is undergoing significant structural change as its traditional base transforms from mid-sized family farms to a bifurcated base of large consolidated agribusinesses and small, often equestrian focused, farms. The challenge faced by Livingston County is to put into place a proactive agricultural support program that can address the needs of the region's growing agribusinesses while leveraging community benefit. These benefits may come from the expected wealth generation that may accompany further consolidation or job creation that may come from attracting the service and support industries that are expected to gravitate toward the consolidated industry.

It is also important to keep in mind that this transition is occurring at a time when land development pressure emanating from the Rochester area is pressuring some of the County's best soil resources. While development is not yet at a pace where it is threatening the viability of agriculture, it is demonstrating a trend that could challenge agriculture in the future.

Based on analysis of empirical data and in-depth interviews conducted with industry leadership throughout Livingston County, the project team has identified the need for mixed economic development and business development programming. In order to support agricultural industry cluster development that fits the current state of the industry, the County should consider a combination of structural economic development programs, such as business retention, expansion, and attraction programming related to primary production sectors; recruitment or internal development of secondary market opportunities; broad based work force development; and infrastructure planning, as well as business development programming that specifically addresses the needs of individual agricultural enterprises. Furthermore, the County should be proactively encouraging towns to support the retention of the best soils and most productive farmland in a manner that supports local development objectives.

Key project findings that support this outcome include the following:

- 1. Livingston County is highly concentrated in a few sectors with the dominant sector, dairy, directly and indirectly accounting for nearly 75% of agricultural output.*
- 2. Among Livingston County's many unique assets is one of the State's highest concentrations of Prime and Productive Soils. These soils are highly suitable for vegetable and field crop production and generally considered highly developable.*
- 3. Consolidation within key industry sectors is a regional phenomenon and is strengthening regional relationships within industry sectors.*
- 4. Regional agricultural infrastructure is strong, but vulnerable to changing market dynamics. This is particularly true of the vegetable processing infrastructure.*
- 5. The general economy in Livingston County lacks robustness in job creation and has little noticeable clustering within nonagricultural industry sectors. Agriculture provides an opportunity to develop a regionally significant cluster of related upstream and downstream businesses. The local workforce composition and transportation infrastructure are supportive of this type of growth.*
- 6. The local workforce is currently conducive to agriculture with a competitive supply of low skilled and semi-skilled labor. Furthermore, the area maintains a relatively large blue-collar workforce with production, warehousing, and transportation related skills.*
- 7. Though increasing, competition for land resources is not significantly driving up land values. However, the cost of holding land, including property tax rates and debt service, makes the opportunity cost for agricultural operators to own and hold land expensive relative to the returns generated by operations. To date, this carrying cost has not impinged on the ability of farmers to acquire highly valued soils, however, marginal ground is being fallowed or developed at a higher rate.*

8. *Due to myriad factors, including the above, intergenerational transfers of agricultural operations are becoming difficult.*
9. *Solid management skills and a strong sense of innovation are present in the region, providing a basis for strengthening the agricultural industry through entrepreneurship.*
10. *Despite strong stakeholder support for agriculture among most agricultural groups, environmentalists, and political jurisdictions, there are significant gaps in understanding among policy makers, regulators, farmers, and other agribusinesses. Misunderstandings include the proper policy responses to the needs of agriculture as well as the tools available.*
11. *The Livingston County Development Group is not an expert in agriculture or its development needs and will benefit from greater involvement by the AFPB in identifying and addressing such needs.*

Based on the above, as well as other analysis and findings presented throughout this report, the project team has assembled the following 13 recommendations.

Recommendations

The recommendations in this report are divided into three distinct groups.

Recommendations 1 through 5 address critical structural and industry-wide concerns that impact the long-term viability of agriculture in Livingston County. The proposed solutions are based on current economic needs and opportunities and seek outcomes that have a direct benefit to the community through such effects as industry stabilization, job creation, enhanced tax base, and improved quality of life.

Recommendations 6 through 8 relate to improving conditions specific to the health and well being of local agricultural enterprises through training, business planning, network development, mentoring, finance, research and development support, and similar services. These recommendations are offered with an understanding that the overall health of the agricultural industry is intricately tied to the financial health of the underlying enterprises.

Recommendations 9 through 13 offer programs and processes that address the land use issues facing both towns and farmers. These recommendations bridge training and education that focuses on defining the needs of agriculture as an industry with refining the land use planning and regulatory functions of the County and towns to be more supportive of agricultural uses.

The report's 13 recommendations are highlighted in the following table.

Livingston County Agricultural and Farmland Protection Plan

Agricultural and Farmland Protection Plan Recommendation								
Recommendation	Proposed Number of Action Items	Implementation Partnerships						
		County Agencies			External Entities			
		AFPB/ County Planning	LCDG	Other ¹	Federal	State	Town	Private ²
1. Develop an Agribusiness Retention Expansion and Attraction Plan	6	√	√	√		√	√	√
2. Enhance Business Development Programs and More Fully Incorporate Agricultural Needs	5	√	√			√	√	√
3. Expand Education and Training Programs	4	√		√		√		√
4. Create an Outreach and Public Relations Program	9	√		√				√
5. Develop a Regulatory and Policy Action Program	6	√		√		√		√
6. Support Entrepreneurship and On-Farm Skills Development	6	√	√	√		√		√
7. Support Broadened Access to Capital	5	√	√	√	√	√	√	√
8. Support Agricultural Leadership Development	4	√		√			√	√
9. Support Farm Friendly County Based Land Use Policies and Programs	7	√		√	√		√	
10. Support Town Based Agricultural Planning	6	√						√
11. Investigate Regional Efforts to Establish Rural Land Protection Tools	4	√		√				
12. Support a County Purchase of Development Rights Program	4	√					√	
13. Promote Understanding and Appreciation of Livingston County Agriculture to the Non-Farm Public	3	√		√	√			

Notes:

1. *Other includes Cornell Cooperative Extension, the Office of Real Property Tax Services, and other County departments.*
2. *Private includes the Chamber of Commerce, Foundations, Farm Bureau, Genesee/Finger Lakes Regional Planning Council, private businesses, and other private/quasi-governmental entities.*

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SECTION 1: INTRODUCTION

1.1 PURPOSE

The purpose of this project is to analyze and understand the foundations of Livingston County's agricultural economy and to create an Agricultural and Farmland Protection Plan that will both fulfill the requirements of the Agriculture and Markets Law 25-AAA and create recommendations for structural economic development programming to ultimately enhance the future of local agriculture. In addition to looking at the broad needs of agriculture as an industry, the project team also examined the business development needs of local farms and agribusinesses. Potential outcomes of this process include:

- Improved on-farm profitability.
- Enhanced agribusiness infrastructure.
- Improved understanding of agriculture as a key economic engine.
- Heightened awareness of agriculture as an important community asset.
- Enhanced market access for local agricultural products.
- Increased value-added production activity.
- Engaged public and elected officials in the future of agriculture.

The project output is intended to encourage long-term policy formation in support of agriculture while providing a specific short-term work plan to guide local programs and agencies regarding specific agricultural economic development and land use initiatives.

1.2 METHODOLOGY

The objective of this study is to determine the extent to which Livingston County's existing and future agricultural industry can be served by directed economic development and land use policies and programs and to make recommendations to the County as to the most appropriate tools and methods to capture such opportunities.

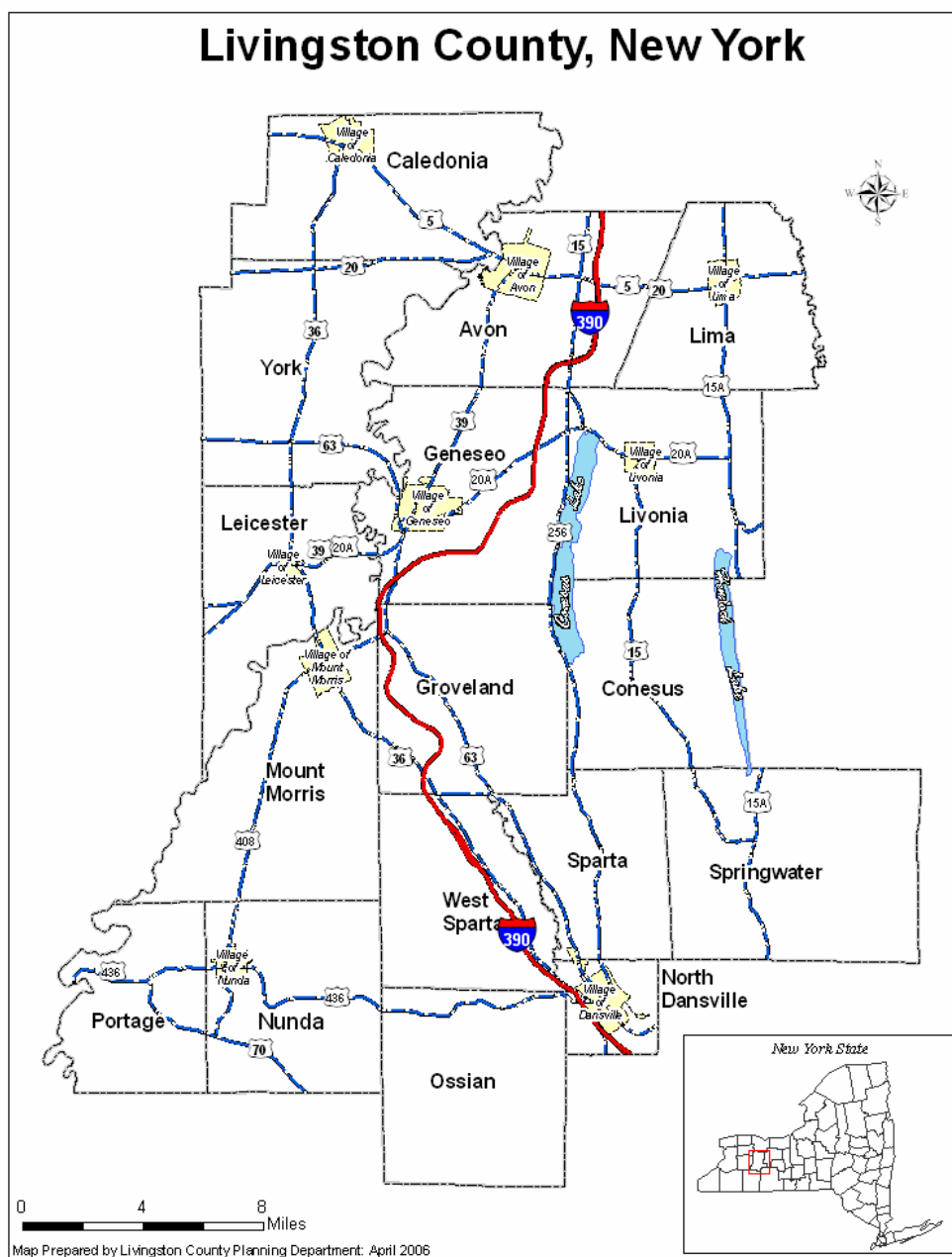
To accomplish this, the ACDS and American Farmland Trust (AFT) study team gathered published data on the study area to assess current conditions and reaffirmed this data by interviewing 64 farmers, agribusinesses, entrepreneurs, service providers, public officials, and community leaders. Interviewees were selected initially from lists provided by members of the Agricultural and Farmland Protection Board. Those interviewed provided additional interviewee contacts. In addition to interviews, the study team sent a survey to town officials to assess on-the-ground land use conditions.

The resulting assessment of the local business and community environments is used to identify opportunities for focused economic and business development efforts and the need for additional land use planning. In support of this analysis, the study team analyzed recent success stories of communities with similar economic, business development, and land use programs designed to leverage agricultural industries for broader economic development improvements.

1.3 STUDY AREA

At the outset of this project, the primary study area, the geographically defined area from which interviewees were selected and data collected, included all of Livingston County.

Figure 1: Livingston County Study Area



In order to better understand the data gathered for Livingston County, the study team developed two benchmarking and comparison regions that are defined in Appendix A.

1.4 REVIEW OF AGRICULTURAL ECONOMIC CONDITIONS

Historically, dairy farms and feed production in support of the dairy industry have comprised the backbone of Livingston County's agricultural industry. Over the years, this position has been solidified, with the County playing an integral part in a Western New York dairy industry that is growing and consolidating to meet the needs of today's dairy industry. Grain production, in support of the dairy industry, has kept pace with the growth of concentrated dairy operations to serve their need for mixed feed rations.

Livingston County's agricultural economy is not completely dominated by the dairy sector. The County also has well developed vegetable and dry bean sectors. The vegetable sector is primarily dedicated to the processing market, specifically for canned and frozen vegetable specialties. The County's dry bean sector produces nearly half of the State's bean output.

Driving factors in the strength of the agricultural industry include a strong natural resource base with high localized concentrations of highly productivity soils, a regionally strong and integrated agricultural sector, and the presence of large, integrated farms. The table on the following page highlights key farming statistics.

Key Findings of Study

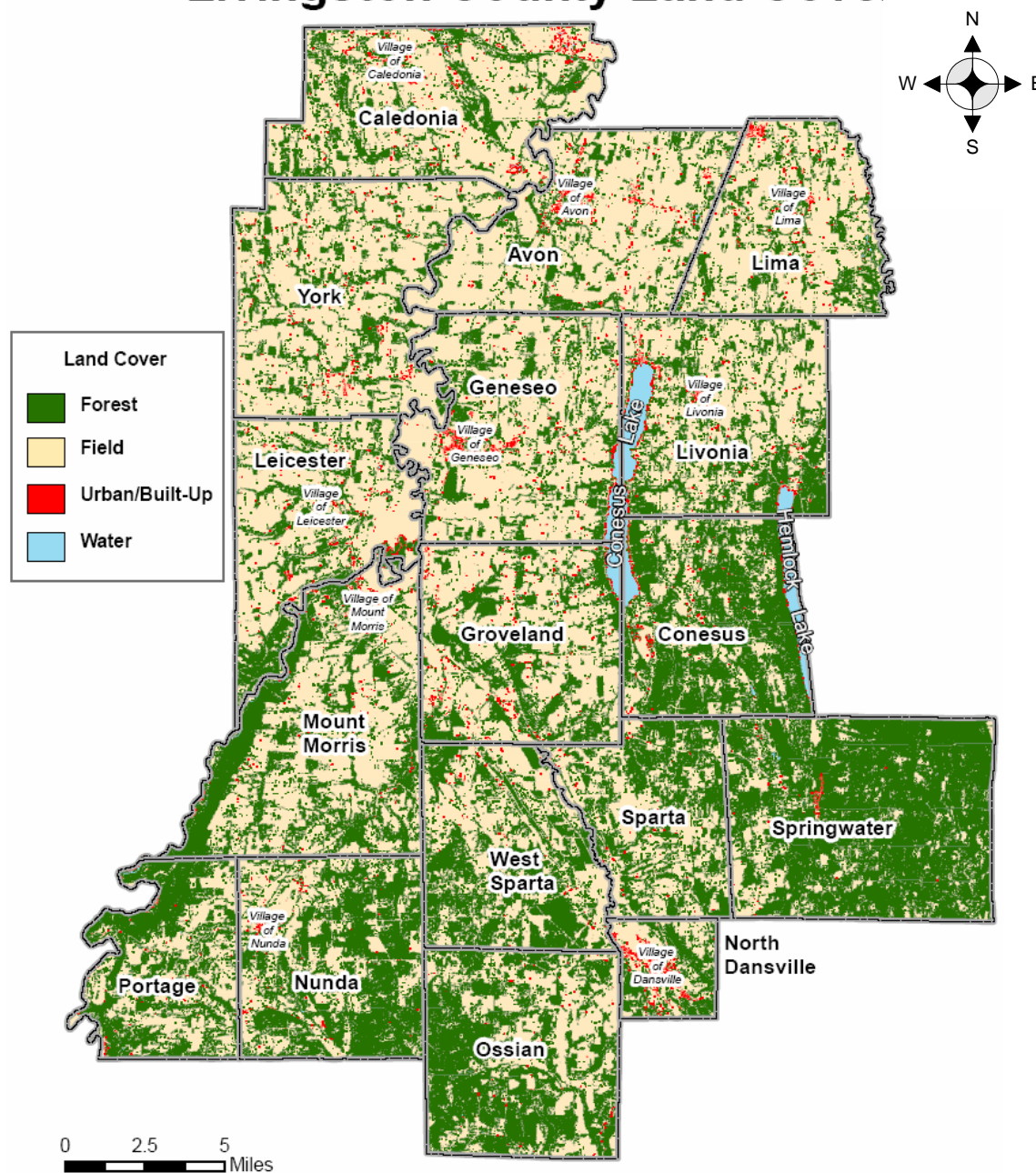
1. Livingston County's farm economy produced \$84.5 million in output value in 2002, which generated an additional \$45.1 million in related economic activity within other sectors of the local economy.
2. Dairy is the dominant agricultural sector accounting for an estimated 70% of farm related output value when including support activities.
3. Dairy remains nationally competitive in part because of high levels of consolidation that has the top ten dairy operations accounting for more than 50% of the dairy cattle.
4. The vegetable, grain, and dry bean sectors integrate well with dairy and support risk managed returns that are scale appropriate for the area's large farms. Collectively, these sectors provide some cushion against industry cycles.
5. Despite positive economic indicators for agriculture overall, Livingston County lags behind its neighbors (Genesee, Wyoming, and Monroe Counties) in average net farm operator income by nearly \$32,000 per operator.
6. Farmland conversion pressure is low locally and regionally, however, cropland is the most vulnerable to development with annual loss rates at just over 1.2%.
7. Because of farm characteristics, demographics, and other market conditions, there are few direct market opportunities in the County.

Livingston County Agricultural and Farmland Protection Plan

2002 Agricultural Census Highlights										
	40-mile County Highlights Summary Data					Livingston County Highlights Summary Data				
	2002		1997		Percent Change	2002		1997		Percent Change
	Data	Units	Data	Units		Data	Units	Data	Units	
Farms	6,043	Farms	6,085	Farms	-0.69%	801	Farms	750	Farms	6.80%
Land in Farms	1,456,949	Acres	1,457,859	Acres	-0.06%	209,496	Acres	209,782	Acres	-0.14%
Average Farm Size	241	Acres	240	Acres	0.42%	262	Acres	280	Acres	-6.43%
Estimated Value of Land and Buildings	\$ 1,956,821	(\$1,000's)	\$ 1,633,089	(\$1,000's)	19.82%	\$ 301,111	(\$1,000's)	\$ 240,244	(\$1,000's)	25.34%
Total Cropland	910,411	Acres	1,039,764	Acres	-12.44%	154,705	Acres	162,152	Acres	-4.59%
Harvested Cropland	817,994	Acres	840,278	Acres	-2.65%	125,344	Acres	133,216	Acres	-5.91%
Cropland Used for Pasture	75,372	Acres	103,565	Acres	-27.22%	9,962	Acres	14,963	Acres	-33.42%
Other Cropland	118,752	Acres	95,921	Acres	23.80%	19,399	Acres	13,973	Acres	38.83%
Woodland	255,028	Acres	243,569	Acres	4.70%	28,428	Acres	26,468	Acres	7.41%
Pastured	25,717	Acres	33,173	Acres	-22.48%	3,644	Acres	2,648	Acres	37.61%
Other Woodland	229,311	Acres	210,396	Acres	8.99%	24,784	Acres	23,820	Acres	4.05%
Pastureland and Rangeland	81,395	Acres	69,602	Acres	16.94%	10,873	Acres	7,621	Acres	42.67%
Pastureland	182,484	Acres	206,340	Acres	-11.56%	24,479	Acres	25,232	Acres	-2.98%
Irrigated Land	20,688	Acres				16,519	Acres			
Total Farm Sales	\$ 658,380	(\$1,000's)	\$ 576,004	(\$1,000's)	14.30%	\$ 84,059	(\$1,000's)	\$ 74,900	(\$1,000's)	12.23%
Crops Including Nursery and Greenhouse	226,768	(\$1,000's)	204,027	(\$1,000's)	11.15%	28,851	(\$1,000's)	28,371	(\$1,000's)	1.69%
Livestock and Poultry	431,611	(\$1,000's)	371,974	(\$1,000's)	16.03%	55,207	(\$1,000's)	46,528	(\$1,000's)	18.65%
Direct to Consumer (Human Consumption)	4,696	(\$1,000's)	5,044	(\$1,000's)	-6.90%	158	(\$1,000's)	462	(\$1,000's)	-65.80%
Net Cash Income										
Positive Cashflow	44.08%	Percent of Farms				40.07%	Percent of Farms			
Negative Cashflow	55.87%	Percent of Farms				59.80%	Percent of Farms			
Principal Occupation										
Farming	3,565		3,133		13.79%	447		381		17.32%
Other	2,478		2,952		-16.06%	354		369		-4.07%
Age of Operator										
Under 55	3,315		3,536		-6.25%	454		398		14.07%
55 and Over	2,728		2,549		7.02%	347		352		-1.42%
Gender of Operator										
Male	5,251	Farms	5,461	Farms	-3.85%	684	Farms	662	Farms	3.32%
Female	792	Farms	624	Farms	26.92%	117	Farms	88	Farms	32.95%
Land Tenure										
Full Owner	4,006	Farms	3,766	Farms	6.37%	561	Farms	477	Farms	17.61%
Full Owner	537,270	Acres	488,164	Acres	10.06%	77,909	Acres	69,097	Acres	12.75%
Part Owner	1,812	Farms	1,963	Farms	-7.69%	216	Farms	230	Farms	-6.09%
Part Owner	878,316	Acres	897,513	Acres	-2.14%	121,313	Acres	129,398	Acres	-6.25%
Tenant	225	Farms	356	Farms	-36.80%	24	Farms	43	Farms	-44.19%
Tenant	41,363	Acres	72,182	Acres	-42.70%	10,274	Acres	11,307	Acres	-9.14%
Years on Present Farm										
9 or less	1,404		1,428		-1.68%	235		165		42.42%
10 or more	4,639		3,877		19.65%	566		488		15.98%

Land Use Patterns

Livingston County Land Cover



Map prepared by Livingston County Planning Department: April 2006

Source: Genesee/Finger Lakes
Regional Planning Council
Land Cover data, 1999.

As is evidenced in the county land cover map above, the County's predominate land cover types are field crops, pasture, and forestland. Development is centered in villages and along road frontage and is generally dispersed with concentrations in the northern areas of the County. Overall, the dominate cover is agricultural.

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SECTION 2: MARKET SUMMARY

The market summary section of this report is intended to synthesize on-the-ground observations of the study team, results of personal interviews and a review of public sector data.

2.1 SWOT ANALYSIS SUMMARY

SWOT analysis is a tool used by strategic planners and marketers to assess the competitive environment of a region, industry, business, or product. It is a very simple technique that focuses on the Strengths, Weaknesses, Opportunities, and Threats (SWOT) facing Livingston County agriculture by asking the following questions:

1. What are the advantages of engaging in production agriculture in Livingston County?
2. What unique local conditions support the agricultural industry?
3. What do Livingston County farmers do well?
4. What do Livingston County farmers do poorly?
5. What can be improved in Livingston County agriculture?
6. What are key regional/industrial trends?
7. What are the options and obstacles facing Livingston County farmers?
8. How does Livingston County agriculture fit within the regional context?

For the Livingston County Agricultural and Farmland Protection Plan, the strengths, weakness, opportunities, and threats were assessed for the agricultural industry overall to include production agriculture as well as agricultural support industries. The SWOT criteria identified are drawn directly from the study team's interviews with the agricultural industry within the County. As such, this analysis should be considered an industry self-assessment. (See Appendix B for a more complete SWOT analysis.)

Table 2.1: SWOT Analysis Matrix

INTERNAL FACTORS	
Strengths	Weaknesses
Agricultural Industry Clustering	Regulation/Policy – County & Town
Support Infrastructure	Impermanence Syndrome
Natural Resource Base	Leadership Development
Market Access	Integration with General Economy
Transportation Corridors	Understanding of Land use Issues
Workforce Composition	Source of Next Generation Farmers
Low Development Pressure	High Carrying Cost of Land
Industry Cooperation and Integration	Inter- & Intra- Agency/Industry Coordination
Land Tenure and Ownership	Grower Disenfranchisement
Entrepreneurship and Innovation	Unbalanced Development Pressure
Private Land Conservation Initiatives	Low Investment Rates
Good Neighbor Relations	

EXTERNAL FACTORS	
Opportunities	Threats
New Market Development (Regional/Energy)	Development Patterns/Pressure (sprawl without growth)
Business Retention, Expansion, Attraction Planning	Regional Competitiveness
Regionalism	International Trade
Value-Added Products and Services	Limited Capital Investment
Regional Project Development Support	Market Concentration
High Fuel Prices	Competitiveness of Agricultural Infrastructure
Food Safety and Homeland Security Concerns	Labor Availability/Labor Regulations
	State & County Fiscal Conditions
	Federal Regulations and Policy

The implications of the SWOT analysis clearly support, a cluster based development focus on the County's (and region's) critical agricultural sectors (Dairy, Grains/Dry Beans, Vegetables, and Livestock) with a focus on the upstream-downstream and service-supply industrial opportunities that surround them. The strengths and opportunities facing the industry provide a clear indication of opportunity that is driven both by the natural resource asset base and the quality of agricultural leadership.

In order to understand how these opportunities may unfold, it is important to understand the specific issues facing each of the agricultural industry sectors as well as the other local economic conditions.

2.2 MARKET SEGMENT SUMMARY

Dairy

The dairy industry is the largest component of New York's agricultural economy accounting for more than 53% of the State's agricultural output at \$1.95 billion. New York exports a significant share of its dairy production ranking it as the third largest exporter of dairy products in the United States. Western New York is a large contributor to these exports.

Livingston County's dairy is a significant agricultural sector representing approximately 53% of the County's overall agricultural output, a proportion that has been slowly declining from 60% since the late 1980's. Despite losing a significant proportion of its dairy operations between 1992 and 2002, Livingston County has been able to enhance both the level of production and income, likely through the efficiency gains related to consolidation.

Table 2.2: Dairy Farms for Livingston County, NY: 1992 to 2002

Item	1992	1997	2002	1992 to 2002 % Change
Number of Dairy Farms	135	104	95	- 30%
Number of Dairy Cows	16,457	17,206	18,540	13%
Total Value of Dairy Products (\$1,000's)	\$35,286	\$39,832	\$44,656	27%

Source: U.S. Census of Agriculture, 1992, 1997, and 2002.

In order to understand the potential impact of an economic development strategy on the local dairy industry, it is important to understand the trends that are impacting the industry at the national and local levels.

National

- Milk production per cow is up 18% over the last ten years.
- Dairy farms are becoming larger and more capital intensive. Farms with more than 500 cows represent 3% of dairy farms and 40% of national production.¹
- After long-term price depression, dairy prices have been strong for the last two years.
- Dairy production is shifting south and west in the United States, specifically to Idaho, California, and New Mexico.
- Dairy cooperatives are becoming larger and more concentrated.
- Dairy processing and distribution are becoming more concentrated under the market leadership of Dean Foods.
- A new dairy support program (MILC) came into effect in 2002 and is expected to provide needed financial support for small dairies.

¹ <http://usda.mannlib.cornell.edu/reports/nassr/livestock/dairy-herd/specda02.txt>.

- Alternative dairy products such as goat, sheep, and soy analogs are growing in market share.

Local

- The dairy industry is rapidly consolidating with the ten largest farms accounting for 53% of the cattle inventory in 2002 (up more than 10% over 1997).
- Small dairy farms (with fewer than 100 head of cattle) have maintained market share while dairy farms with 100 to 499 head have declined at an annual rate of 6.6%.
- Small and medium sized dairy farms are concerned about competitiveness and farm transition.
- The area does not fall under a Federal Market Order but is influenced by Market Orders 1 and 33.
- Livingston County dairy farms are competitively served by milk handlers and other dairy service providers.
- Livingston County dairy farms tend to be well integrated with other agricultural operations and exhibit high levels of inter-industry cooperation.
- Dairy operators, locally and regionally, tend to be highly innovative and entrepreneurial.
- Continued dairy expansion amidst current growth pressure seems likely, both locally and regionally.
- Unlike other areas of the State, dairy farm turnover is accompanied by overall growth of the production base.
- Fragmentation of the land base for dairy support activities is a concern.
- Vegetable production and dairy farm operations are becoming increasingly intertwined.
- The dairy industry supports significant hay and forage production.

By most benchmarking methods, Livingston County's dairy industry can be described as healthy. Cow numbers are on the rise, and income is increasing along with production. Furthermore, the County is not an isolated case within the region. Nearby Western New York Counties, such as Wyoming and Genesee, are under going similar growth and consolidation. This larger, multi-county dairy production complex offers the region certain benefits in market access and cost control that come through enhanced scale economies. Location factors and solid transportation infrastructure also contribute to the industry's health. Scale efficient producers can independently access any number of Market Orders in the Midwest and East Coast to balance production and income.

However, conditions across the industry are not all positive. Mid-sized producers in Livingston County, despite good milk prices recently, are concerned about their future. With higher per unit operating costs, labor issues, and no evident next generation, this group of farmers feel that they are the most likely to transition out of agriculture in the foreseeable future. The change in farm numbers by farm size supports this assertion.

Given the above issues, the dairy industry is best supported through directed economic development efforts that capitalize on the regional strength of large producers with business development support for small and mid-sized producers.

Grains and Dry Beans

Despite producing nearly one million acres of grains and dry beans, New York remains a net importer of these crops. Much of New York's grain and soybean production is raised as a feed input for the State's livestock industry. Dry beans are an exception with the State producing export quantities of approximately 28.3 million pounds of dry beans this year, ranking it in the top ten producers of dry beans. Livingston County's combined sales of \$15,562,000 in grain and beans rank it as the State's top producer of these crops.

Much of Livingston's grain and bean production is driven by the needs of the dairy industry with corn, wheat, oats, and soybeans for grain leading production with over 4 million bushels of production in 2002. Despite steady declines in regional production, Livingston County dry bean production, such as kidney and black turtle beans, account for another 136,350 hundredweight (40% of the State total) of output. Livingston County, due to its good soils and strong dairy and vegetable sectors, has been able to integrate grain production, and to a lesser extent dry beans, into the larger production system and balance crop cycles.

Table 2.3: Grain and Dry Bean Acreage for Livingston County, NY: 1992 to 2002

Crop	1992	1997	2002	1992 to 2002 % Change
Corn for Grain	31,207	35,824	26,197	-16%
Wheat for Grain	13,904	14,371	14,296	10%
Oats for Grain	4,700	3,603	2,052	-56%
Soybeans for Beans	N/A	3,287	4,851	N/A
Dry edible Beans	N/A	14,356	10,698	N/A

Source: U.S. Census of Agriculture, 1992, 1997, and 2002.

In order to understand the impact of the Agricultural and Farmland Protection Plan on the grain and dry bean sectors, it is important to understand certain industry trends.

National

- Nationally, grain and dry bean markets have been highly cyclical in terms of price and production.
- Grain and dry bean markets have become truly global markets with international demand and supply conditions significantly impacting domestic markets.
- Dry bean markets have consolidated significantly at a time when traditional production centers have shifted toward the western United States.
- After lagging export volumes, low hold over stocks and increased demand are providing positive price movement in the dry bean market.
- Grain supplies are up based on high 2004 production and higher than expected Chinese production keeping prices generally depressed.
- Grain demand for feed uses has not kept pace with expected rates of increase.
- Commodity producers are exploring greater use of Identity Preserve (IP) grains to better manage cycles.

- Expanded use of corn for ethanol production may positively impact grain prices. The recent federal ban on MTBE and rapidly rising energy prices will enhance this trend.
- Changes in consumer dietary habits are shifting consumption away from grains.
- Genetically modified grains continue to spark international debate about environmental and food safety and present a non-tariff barrier to U.S. exports.

Local

- Depressed grain and bean prices make it difficult for high cost production regions like New York to be competitive.
- Local grain production is geared toward local livestock markets, but must be competitive with Midwestern grain prices due to market proximity.
- Generally, elevator, mill, and dry bean bagging and cleaning infrastructure are aging and inefficient.
- New grain marketing facilities have been added to the region increasing competitiveness.
- High fuel prices have raised interest in developing local ethanol and bio-diesel production capacity resulting in a recently announced ethanol plant development in Orleans County.
- Buyer consolidation in both grains and dry beans is a concern to local producers.

Grain and dry bean producers in Livingston County are undergoing the same stresses as producers throughout much of North America. The international nature of markets, especially spot markets, combined with increasing overseas production helps to cap prices in the grain markets. As a net consuming area, New York benefits slightly from its transportation differential, which is often offset by unpredictable growing conditions and higher production costs. Proximity to the dairy industry has historically been a key to the success of grain production, but this may change with the economics of grain production relative to purchasing outside sources of grain and/or the transition to a forage based feed system for livestock. Hardest hit in the current system are small and mid-sized grain and bean producers who lack scale efficiencies.

As with dairy, the grain and dry bean sectors may be well served by a concerted economic development effort focused on increasing utilization and/or IP product development. Certainly, improving market accessibility and market competition would be positive. For those farms pushing innovation or transition, business development support may prove valuable to facilitate management decision-making.

Fruit and Vegetable Production

The produce industry, for both fresh market and processed fruits and vegetables, consistently places New York in the top ten production areas in the nation (6th in 2002 for fresh vegetable production with \$503.1 million in output). Livingston County is a significant contributor to New York's produce industry accounting for \$7.3 million in fruit and vegetable output in 2002, which was 1.5% of New York's total fresh and processing market that year. While fruit and vegetable production is not an anchor for the local agricultural economy, it is closely linked to a regional vegetable production base anchored regionally by Genesee, Orleans, Monroe, and Wayne Counties.

Table 2.4: Fruit and Vegetable Acreage for Livingston County: 1992 to 2002

Commodity	1992	1997	2002	1992 to 2002 % Change
Vegetable and Melon	6,967	10,170	5,881	-19%
Fruits, Nuts, and Berries	83	87	418	504%

Source: U.S. Census of Agriculture, 1992, 1997, 2002.

In order to understand the potential impact of changes in the produce industry sector on agriculture and therefore the Agricultural and Farmland Protection Plan, it is important to understand the trends that are impacting the industry at the national and local levels.

National

- Production of fruits and vegetables is becoming concentrated, either directly or through producer alliances, in the hands of large grower-shippers.
- Year-round fresh produce consumption is replacing consumption of canned and frozen produce items.
- International produce sourcing is growing in importance as a component of grower-shipper produce movements.
- Distribution and marketing tasks, such as inventory management, demand forecasting, category management, and productivity analysis are being forced down the distribution chain to the grower/shipper², meaning scale efficiencies are more important at the grower level.
- Produce sales increasingly rely on Electronic Data Interchange (EDI) as a key component of vendor managed inventory services.
- Value-added fresh produce accounts for 25% of produce department sales. Cut fruits and vegetables will account for much of the growth.
- Value-added fresh produce is highly concentrated with the top five lettuce/salad processors maintaining a 91% market share.
- Direct buying is expected to account for up to 75% of all retail and foodservice produce purchases by decade's end.³ Much of this will occur under contract.

² "Supply Chain Management in the Produce Industry," produced by Produce Marketing Association and Cornell University in 2001.

³ Ibid.

- Produce origin is becoming a more important issue in the retail sale of produce with nearly 90% of all consumers expressing an interest in country of origin labeling.⁴

Local

- Over 80% of vegetable production is for processing vegetables.
- Fruit and nut production is not a significant element of produce production.
- Investment in orchards increased significantly over the last five years with the addition of more than 200 acres of apple trees.
- Vegetable production is anchored by the region's processing capacity and is closely tied to the financial health of companies like Pro-Fac/Birds Eye Foods.
- Grower control over processing operations has been diluted by the sale of Pro-Fac's production assets and brands to Vestar Capital Partners.
- Produce production is dominated by large, diversified operations.
- Major crops are peas, sweet corn, beets, and potatoes.
- Potato production has seen regular declines based on the loss of chipping markets.
- Labor force, while adequate, remains a significant source of concern for produce operations.
- Produce operations are slowly diversifying/integrating with the dairy industry through formal and informal linkages.
- The number of wholesale market outlets in the region is diminishing.
- Competition from producers outside of the region is significant and growing.

Livingston County produce production closely follows regional trends and is very closely linked through ownership and management to operations in Genesee, Wyoming, and Monroe Counties. Cycles are most significantly influenced by conditions in canned and frozen vegetable processing and the market share of the Birds Eye brand. As such, local production is closely linked to vegetable production in Michigan and California, where Pro-Fac/Birds Eye vegetable operations are concentrated. Fresh market vegetables, on the other hand, are less concentrated within a single processor network. Fresh market production is geared toward cash market sales to wholesalers, supermarket warehouses and, to a much lesser extent, fresh cut operation.

Because there is not a significant retail population base in the area, there tend to be few direct market oriented vegetable farms. According to the latest Census of Agriculture, direct market sales have been in steady decline falling to \$158,000 for all direct market sales in 2002. The fact that the area supports only one community farmers' market corroborates that retail opportunities are limited.

Because the producer base is oriented towards processing and wholesale fresh market production, producer interest focuses on economic development responses rather than business development responses to need. Many farmers find that increasing crop diversification on-the-farm beyond a few key crops can decrease production and

⁴ Fresh Trends 2002.

marketing efficiency. The primary issue facing most local farmers is access to today's rapidly changing processing, wholesale and distribution environments. In this light, economic development programming should seek to increase localized marketing partnerships, enhance value-added product development, encourage increased production efficiency, and improve collaborative production and marketing services.

Greenhouse/Nursery

The nursery and greenhouse industry in New York is rising quickly through the ranks of the State's most important industry sectors. As of the 2002 Census of Agriculture, New York State was producing approximately \$344,320,000 in output, placing it among the nation's top ten nursery and greenhouse producers.

Despite some growth, Livingston County has not been able to capitalize on the greenhouse and nursery industry the way more metropolitan influenced counties have throughout the State. The major component of the County's industry is the floriculture industry, which accounts for the majority of the production under glass. Nursery crops account for the bulk of the remaining production and are concentrated on a small number of farms.

Table 2.5: Greenhouse/Nursery Production for Livingston County, NY: 1992 to 2002

Item	1992	1997	2002	1992 to 2002 % Change
Number of Farms	20	44	31	55%
Production Area under Glass or Protection (sq. feet)	87,820	73,288	142,040	62%
Production in the Open (acres)	211	588	289	37%
Value of Sales (million)	\$1.391	\$1.642	\$2.137	54%

Source: U.S. Census of Agriculture, 1992, 1997, and 2002.

Key trends of note in the local greenhouse and nursery industry include the following:

- Nursery and greenhouse operations tend to be small and niche oriented.
- Coordination among the industry's divergent operations is poor. The nursery and greenhouse sector does not have a strong local voice, as do other sectors.
- Unlike its counterparts in many New York jurisdictions, the local industry is not as well integrated with regional landscape architects, installers, and designers.
- The industry is dispersed throughout the County.
- The sector tends to be highly compatible with residential uses.
- Growth in this sector tends to follow high development pressure.
- The nursery and greenhouse industry does not have strong local service and supply networks.

Given its current growth rates, the nursery and greenhouse industry is unlikely to surpass the output of any of the key agricultural sectors in the near term. New entrants to this sector are likely to be relocations from other regional jurisdictions that are looking for cheap land and access to markets or new business starts-ups from within the County. By virtue of its production characteristics and slow growth rate, it is not likely that this industry will play as significant a land use role. In fact, past development trends indicate that much of the new production space will enter the market under cover, producing high value relative to its land cover. Such operations are also heavy seasonal employers.

Because of this, the nursery and greenhouse industry is not likely to benefit from economic development programming at this time, however, it is a candidate for business development and finance programs. Furthermore, this sector is also likely to benefit from workforce development such as job/life skill training, English as a second language programs, and affordable housing.

Equine

The equine industry remains one of the most poorly understood and poorly measured of New York State's agricultural industries. The primary contributing factor is the difficulty in defining an industry that straddles agriculture and recreation. However, it is largely understood that New York's equine industry is a critical driver of economic activity in the State as well as in Livingston County. This assertion is supported by Livingston County's proximity to two large horse concentrations in Erie and Monroe Counties.

Livingston County's horse industry is very much like that of New York State. In terms of diversity, the industry includes wide ranging subsectors in breeding, training, boarding, showing, trials, organized hunts, trail riding, racing, performance, and pleasure. As one would guess, these sectors tend to be highly divergent in their interests, trends, and patterns and they attract very different stakeholder groups. Because of this, the industry tends to be disaggregated and unorganized. Developing a statistical picture of the industry is a serious challenge since USDA does not generally report equine statistics and New York State's recent efforts to profile the industry through a statewide survey received poor results. The following are reported about Livingston County's and Western⁵ New York's equine industry in the 2000 New York State Equine Study:

- Nearly 52% of 7,100 horse operations in the Western region classify themselves as non-commercial and non-farm operations. The next highest concentration of operations is self-classified as crop and livestock farms (24%) and commercial boarding and training at 15%.
- Livingston County has the fourth highest horse inventory in the Western region and the eighteenth highest horse inventory in the State.
- The region's horse inventory is 85% light horse breeds of which racing horses are just over 24% of the inventory.

⁵ Western New York, as defined by the 2000 New York Equine Study, includes Erie, Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates Counties.

- Nearly 34% of the inventory is kept for pleasure with 29% kept for competition or racing, and 20% for breeding purposes.
- Livingston County has the twenty-first highest valued equine inventory in the State and the fourth highest in the region.
- Horse inventory in the region and County fell between 1998 and 2000 by 13% and 3% respectively. Statewide inventory fell by 8%.
- The value of equine inventory in the region and County fell by 20% and 27% between 1998 and 2000 respectively, indicating a change in the composition of horse ownership.
- 83% of equine operations have been in business 6 years or longer.
- The “Preceding Use” of most equine operations in the Western region was most often a crop or livestock farm (52%) or a non-agricultural use (20%). Only 18% were previously a horse operation.

Despite strong fundamentals in equine value and on-farm investments, the horse industry is considered by many insiders to be stagnant or declining. Growth within sectors, such as boarding and commercial horse operations, is assumed to be coincidental with a reduction in backyard equine impoundments. This assertion is certainly supported by the decline in horse numbers in both the County and the region. However, maintaining the equine industry is critical for the health of agriculture, if for no other reason than its strong linkages to agricultural support land (e.g., hay production ground) and agricultural infrastructure such as feed dealers, animal nutritionists, large animal vets, and tractor dealerships. Other important characteristics, though not easily quantified, are the equine industries’ significant impact on tourism and recreational opportunities, positive quality of life attributes, and land use/viewshed impacts.

Supporting the horse industry through economic and business development programming in Livingston County will prove challenging. Given the part-time and avocational nature of most operations and the divergent interests of the many constituencies within the equine industry, it is difficult to pinpoint specific opportunities for enhancement. Several common themes generated throughout the interview process did involve the need to expand trail access, as well as address a shortage of public event space. Though not specifically mentioned, services such as animal health training/mentoring, pasture management, business management for boarding operations, and nutrient management will be important to offer to this industry as many entrants are new to farm management and animal husbandry.

Livestock

Livestock is another important sector in New York agriculture contributing approximately \$2 billion in annual sales. A significant portion of this activity can be attributed to New York's large dairy industry that provides a supply of replacement heifers, bull calves, herd culls, and other livestock to local and regional markets. Livingston County's livestock sector, exclusive of dairy products, produces 12% of the County's annual agricultural output. This is in part due to the dominance of the dairy industry and its spin-off impact on the livestock industry.

The local industry, though small, is made up of several components. The first is dairy related livestock sales driven by the dairy replacement business. The second is the production of beef cattle (replacements, feeders, stockers). The final, and smallest, sector is the growing number of small rumen and alternative livestock producers who typically produce for personal consumption, freezer trade, or ethnic markets.

Table 2.6: Livestock Inventory for Livingston County, NY: 1992 to 2002

Item	1992	1997	2002	1992 to 2002 % Change
Cattle and Calves				
Farms	319	317	237	-26%
Inventory Sold	16,314	20,843	20,796	27%
Value of Sales	6,358	5,751	9,948	56%
Small Rumen				
Farms	47	41	53	13%
Inventory Sold	3,089	2,397	2,962	-4%
Value of Sales	Withheld	Withheld	Withheld	
Hogs and Pigs				
Farms	41	29	29	-29%
Inventory Sold	711	293	308	-57%
Value of Sales	76	52	30	-61%

Source: U.S. Census of Agriculture, 1992, 1997, and 2002

As with other sectors, understanding key trends in the industry will help to define the role of the Agricultural and Farmland Protection Plan relative to the local industry.

National

- Consolidation and specialization within the dairy industry supports a growing business in dairy replacements.
- Beef producers are relying more heavily on science based quality assurance programs to generate enhanced profits.
- Grouped sales are becoming more important for sale operators.
- Small rumen production is being revitalized by ethnic and specialty demand.
- Meat marketing and processing is dominated by large firms with high industry concentration within and across species.
- Meat marketing systems have moved away from carcass meat and toward boxed meats.

- Producer cooperatives and small businesses around the country have been successful in developing niche oriented premium and certified meat products.
- Small meat packers and slaughter plants are declining nationwide.
- Food safety concerns dominate the meat industry and strongly influence the consumers' perception of the industry.
- Value-added and ready-to-eat meat products represent the fastest growing market segments.
- Young families, ethnic, and health conscious consumers are driving new product development.
- Slotting fees, the practice of charging food companies for shelf space in retail establishments, is becoming common for meat products.

Local

- Regional efforts to develop livestock cooperatives and slaughter plants are underway to increase marketing and kill potential.
- Consolidation and closings have functionally reduced the number of regional livestock markets, slaughter facilities, and packing houses.
- Farm operations, typically new entrants, are increasing small rumen herds in response to increased demand for goat and lamb products.
- Certification programs, including producer self-certification, of organic, grass fed, heritage breed, and natural meat products are becoming more prominent in the region especially among small producers.
- Infrastructure limitations in both input and output industries make competitive production difficult.

Based on interviews and project team experience, the opportunity to support the livestock industry will have the most significant and meaningful impact on the dairy industry and should therefore focus on improvements in local infrastructure. This is especially true in relationship to marketing infrastructure such as buying stations, auction markets, rendering plants, and slaughterhouses. These issues are most prominently faced by small livestock producers, who have limited ability to economically find solutions in the marketplace. Because of this, it is most likely that small livestock producers will benefit from business development services such as market development, management training, and technical assistance services.

2.3 IMPLICATIONS FOR THE AGRICULTURAL AND FARMLAND PROTECTION PLAN

This analysis of market segments and Strengths, Weaknesses, Opportunities, and Threats found the following issues to be of particular importance to Livingston County's agricultural industry:

Farmland is stable and not under high conversion pressure. Acreage in farmland is stable and where conversion pressure is evident, the best soils are not being retired first.

Farming is bifurcated and trending toward highly concentrated operations. The largest farms account for an increasingly large share of output. These farms are also becoming more diversified through formal and informal partnerships. Small and mid-sized farmers feel most economically challenged and most likely to be forced to transition.

Regionally and locally, the agricultural industry exhibits strong clustering tendencies. Cluster in livestock (dairy), vegetables, and other field crops offers opportunities to expand service and supply networks as well as output industries to the benefit of industry and the community.

Innovation and entrepreneurship are characteristic of agricultural leadership. Industrial development opportunities are enhanced by strong and innovative agricultural leadership at a regional level. Leadership is also cooperative across industry sectors.

The agricultural industry is strong regionally. Livingston County is part of a vibrant western New York agricultural industry and benefits from its association with the region and its strong input and output industries.

SECTION 3: ANALYSIS OF LOCAL CONDITIONS

The following analysis reviews a series of local conditions that may have a significant impact on the success of an Agricultural and Farmland Protection Plan in Livingston County, New York and is based largely on a review of public data sources.

3.1 ENVIRONMENTAL ASSETS

By its very nature, agriculture is an industry that relies on accessible and high quality environmental assets such as soil and water. In fact, these inputs to agricultural production are necessary components for developing and supporting a healthy agricultural industry.

Soils

Soil quality is of primary importance in assessing agricultural productivity and represents an asset that remains relatively fixed over time. Livingston County has a wide range of soil qualities and conditions, anchored by the highly productive soils found in the towns of Mount Morris, Leicester, York, Caledonia, Geneseo, Avon, and Lima. USDA classified “Prime” and “Productive” soils are found in large contiguous blocks in these areas, and are otherwise found in dispersed pockets in other parts of the County. Because many of these soils are well drained, they are often considered prime candidates for development.

Note: Livingston County is currently considering an update of its soils survey. Therefore up-to-date soils data was not expected until after the completion of this project.

Topography

Livingston’s topography varies significantly across the County. Towns in the northern and western regions of the County have gently rolling slopes, combined with high quality soils, which make them attractive for cropping. Other areas of the County find significant portions of towns on steep slope and some, such as Groveland, find its farmland in flood plains.

Water Resources

Livingston County represents the western most portion of New York’s Finger Lakes region and is therefore defined by its water features. The two most prominent water features are Hemlock Lake (City of Rochester water supply) and Conesus Lake. Both of these watersheds are currently managed to protect watershed quality.

In terms of impact on agriculture, the most problematic of these watersheds is the Conesus, which is under an inter-municipal watershed management plan that targets

improvements to water quality. Agriculture is one focus area of the management plan and is overseen by the watershed's agricultural committee. One of the fundamental tenets of the plan is to work with farmers to implement agricultural Best Management Practices (BMP's) on a cost share basis. This is especially true for Concentrated Animal Feeding Operations (CAFO).

Outside of surface watershed issues, groundwater supplies are adequate for crop production needs and there are few serious issues. One issue to monitor for its potential future impact is salt water intrusion in agricultural wells proximate to the salt mine collapse in Leicester.

3.2 INFRASTRUCTURE

A basic requirement of agricultural industry development is the capacity of the community to support its needs for infrastructure. Key elements of agricultural infrastructure include marketing infrastructure, service and supply networks, public utilities, energy, telecommunications, and transportation. The study team assessed the following key elements of local infrastructure from both a perceptual and physical standpoint, to gauge Livingston's competitiveness in today's market place.

Marketing Infrastructure

Farmers in Livingston County have direct access to a solid marketing infrastructure at both the processing and wholesale levels. They also have good proximate access to consumer markets and retail outlets known for direct farmer purchases such as Wegmans.

As Table 3.1 demonstrates, a range of wholesale and secondary marketing options duly serves the market area. Dairy and vegetable farmers sell into a strong processing market that is well defined and highly competitive. On the dairy side, the market is anchored by firms operating outside of the County such as Lactilis in Buffalo and Oatka in Batavia. The vegetable system is anchored by Birds Eye Foods. Table 3.1 points out the regional concentrations of food manufacturing and wholesaling.

In addition to its local marketing infrastructure, Livingston County is proximate to many major metropolitan markets being nearly equidistant to Cleveland, Pittsburgh, and metropolitan New York.

**Table 3.1: of Wholesale Food Businesses,
4th Quarter 2005**

Description	SIC Code	Livingston County # of Firms	Regional Counties # of Firms
Food Manufacturing			
Food Manufacturing (Excludes Sugar Processing, Beverages, Seafood and Ice)	Parts of 20	1	27
Dairy Product Manufacturing	2021, 2022, 2023, 2024, 2026	1	13
Meat and Poultry Packing Plants	2011, 2013, 2015	1	9
Vegetable Processing (canned, frozen, preserved, and fresh cut)	2033, 2034, 2035, 2037, 2099	2	32
Food Wholesaling			
Groceries	5141	1	41
Packaged Frozen Foods	5142	0	6
Meats and Meat Products	5147	1	16
Fresh Fruit and Vegetables	5148	0	20
Other Food Wholesalers	5143-5146 and 5149	3	105

Source: Dun and Bradstreet, I-Market.

Based on results of in-person interviews, several areas of need were commonly addressed relative to Livingston County's marketing infrastructure. First, dairy farmers were quick to point out the need for additional manufacturing capacity in the region that might create direct demand for local production or provide additional plant balancing opportunities. Produce growers similarly expressed interest in attracting or developing fresh/minimal processing opportunities targeting the regional market. Finally, livestock and dairy producers noted a fundamental need for additional livestock processing capacity as the current regional system of qualified operations is considered to be over-capacity. However, most farmers concede that the County does not have sufficient livestock production to support a slaughter and processing facility except as it relates to dairy culls, calves (veal), and similar spin-offs of the industry.

Service and Supply Networks

Despite having a relatively robust agricultural industry, Livingston County has seen some decline in the local and regional service and supply networks (See data in Appendix E). This is particularly true for the dairy and vegetable industries where local services such as veterinary, livestock processing, feed milling, and dairy equipment services are consolidating. Looking across the broader region, the picture for agriculture is not significantly different though it remains relatively robust. Table 3.2 highlights the regional distribution of selected service and supply businesses.

**Table 3.2: Inventory of Service and Supply Businesses,
4th Quarter 2005**

Description	SIC Code	Livingston County # of Firms	Regional Counties # of Firms
Crop Services (Soil Prep, Crop Protection, Custom Harvesting)	0711, 0721, 0722, 0723	5	28
Livestock Services (Large Animal Veterinary, Breeding, and Equine Services such as Boarding and Training)	0741, 0742, 0751, Parts of 0752	16	260
Farm Labor Contractors	0761	0	2
Farm Management and Horticulture Consultants	0762, Parts of 0781	0	7
Farm Machinery and Equipment (includes Irrigation, Hydroponics, Greenhouses, Dairy Equipment)	Parts of 5083	2	25
Grain Marketing	5153	8	15
Livestock Marketing	5154	1	8
Farm Inputs (includes Livestock, Nursery, and Greenhouse Supplies)	5191, Parts of 5193	7	68

Source: Dun and Bradstreet, I-Market.

While the service and supply infrastructure remains strong, there is a concern that heightened concentration may allow for oligopolistic pricing behavior over time. Farmers, through the course of interviews, did not express a concern that service quality and pricing are a challenge to their operations.

Public Utilities

Access to affordable and reliable water and sewer is a primary infrastructure need for any type of development, whether it is agricultural or commercial in nature. Limitations to these utilities, real or perceived, can be a limiting factor in a region's agricultural economic growth especially as it relates to downstream industries such as food processing.

Access to water and sewer infrastructure within the market area, especially in key transportation corridors such as the I-390 corridor, is regarded as supportive of industrial development especially for food manufacturing. This is supported by the presence of food processors in the northern portion of the County. Integration of water and sewer systems under county authority is expected to consolidate this infrastructure overtime. This is currently evidenced at the Exits 7 and 10 on 390 where new industrial growth has been planned around infrastructure and is readily evident. Access to lateral connections for residences is restricted within the County's Agricultural Districts, supporting the use of district lands for agricultural production.

Energy

Many applications in agriculture and agribusiness are energy intensive and require reliable, high quality electricity supplies. This is particularly true in dairy production where issues of power quality and condition can seriously impact animal productivity. Generally, energy resources are widely available, reliable, and of sufficient quality to support industry development of both the production sector as well as upstream and downstream industries. However, the high cost of energy, and in some cases, end of the line power quality issues were raised by farmers as a challenge to growth.

Telecommunications

Modern industry requires increasing amounts of bandwidth to support the critical flow of data. For those farms and agribusinesses that rely on the telecommunications systems for systems control, sales, and data transfer, these systems must also provide a high degree of reliability, and in some cases, redundancy. Livingston County's infrastructure varies widely within the County. Many farms operate on dial-up service and do not have access to broadband services. Within major transportation corridors and population centers, a wide variety of services are available. Cellular coverage can be spotty due to terrain issues and limited tower coverage.

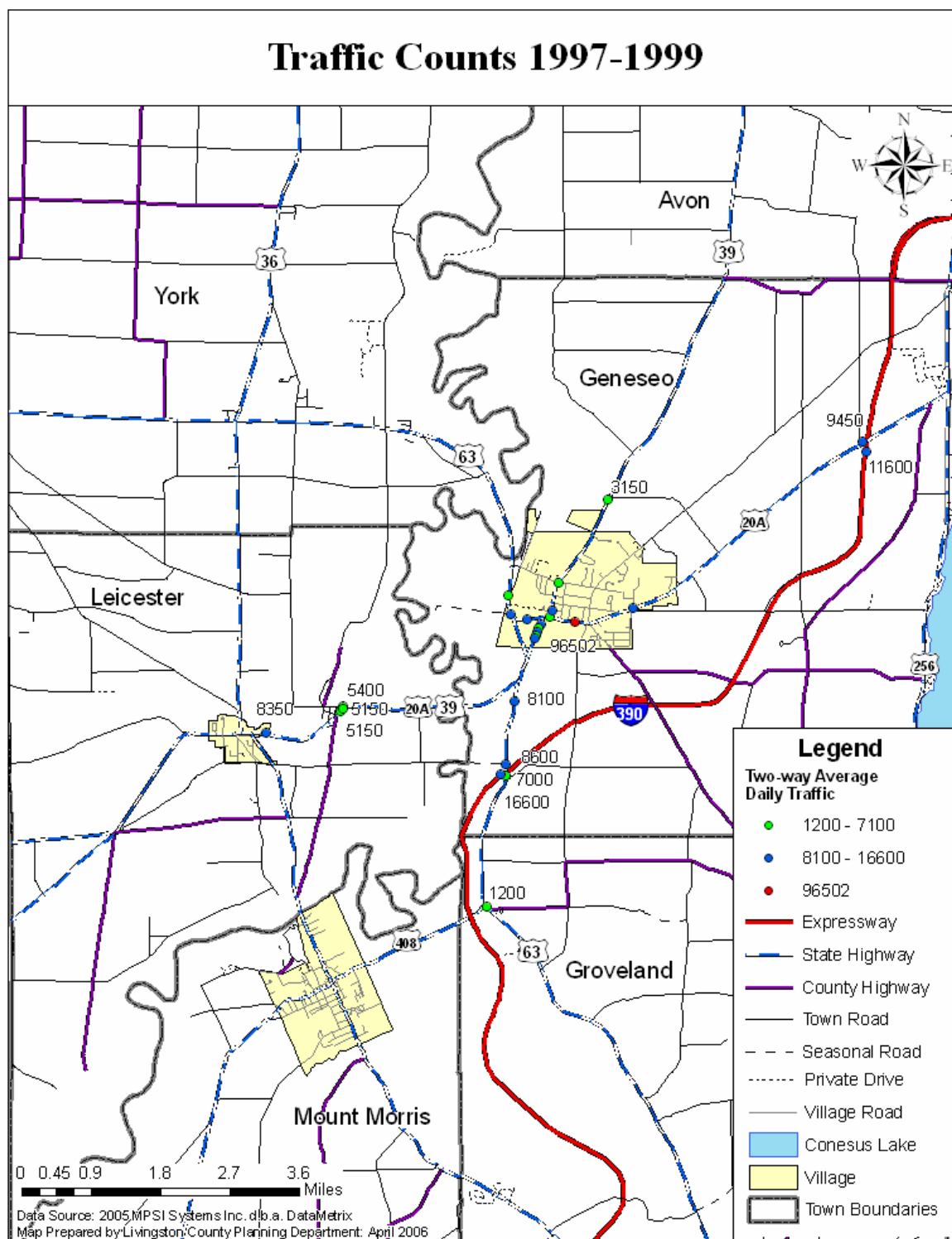
Transportation

Agriculture is an export-oriented business that relies heavily on an efficient transportation network. This is increasingly true in Livingston County given that county farms rely more and more on outside service and supply networks for time sensitive inputs to production.

For the purposes of supporting agriculture and agribusiness, the ground transportation system in Livingston is solid. The County is bisected by Interstate 390 providing north-south access. The New York State Thruway, which provides east-west access across the State is just north of the county line in Monroe County, is linked by I-390 to Interstate 86, the major southern east-west corridor directly south of the County.

Several state routes provide additional east-west and north-south access and are generally considered solid transportation corridors. The most problematic of these from a transportation standpoint are the Route 63 and 36 corridors, which run through Livingston and are used by long haul truckers to avoid the thruway when connecting with I-390. Traffic congestion, high speed truck travel, and enhanced law enforcement activities⁷ on this road have been cited as problematic for moving agricultural equipment. The impact of this traffic flow can be seen on the map on the following page that depicts 1999 traffic flow volumes at various intersections.

⁷ Traffic enforcement itself is not a problem for farmers. Yet several cited that poor law enforcement training has led to conflict when agricultural-use traffic has been held to over-the-road standards in this corridor.



As noted previously, transportation systems must also be accommodating to farmers and agribusinesses that are engaged in production agriculture. Roads that are designed to carry high-speed freight and commuter transportation traffic are rarely conducive to conveying slow moving agricultural traffic between operations. Livingston County's network of state, county, and town roads provide this accessibility and as the portions of the County grow, the road system should be designed to accommodate the mixing of agricultural traffic and commuter traffic.

For those farms requiring freight transport, the region supports a wide variety of competitive options including air, rail, barge, sea freight, and over-the-road options including several short-line rail options as well as major national carriers.

3.3 HUMAN CAPITAL

Production agriculture, as well as upstream and downstream industries, requires human capital as an essential production input. This holds true at all levels of employment from unskilled labor to technical professionals and management. Some of the key factors impacting agricultural human capital are investigated below.

Workforce Composition

As a proportion of its overall workforce, agriculture is a relatively small percentage (4 percent). As workforce requirements tend to be highly seasonal and manual in nature, one would expect to see a highly mobile regional workforce in areas that support large agricultural industry sectors.

Livingston County's current workforce composition, though relatively stable, shows signs that it is transitioning from traditional, labor oriented positions in manufacturing, farming, and warehousing to a broader employment base including business services, professional services, and healthcare. Because of this, it is likely that the skills desired by farmers such as prior experience in agriculture, understanding of machinery and equipment, and CDL drivers are less available now than a decade ago. As the demographics of the area change with the current influx of new residents, this trend is likely to continue.

It is also expected, that the new influx of residents will likely increase underemployment, as "trailing spouses" with professional training enter the local job market. Long term, this condition is likely to attract a greater level of technical and professional employers. In addition to these factors, Livingston County also has a large number of employees engaged in public sector positions and retail trade positions, accounting for 34% of the total work force. Small, but important subsets of the private sector workforce include trade workers in wholesale trade, transportation and distribution, manufacturing, and accommodations indicate that the area remains open, from a workforce standpoint, to expansion in production, warehousing, and transportation oriented jobs.

Table 3.3: Livingston County Workforce Distribution, 2001-2003

Type	2001	2002	2003
Total employment	28,150	28,499	28,631
Wage and salary employment	20,867	20,974	20,878
Proprietors employment	7,283	7,525	7,753
Farm proprietors employment	766	767	767
Nonfarm proprietors employment (excludes limited partners)	6,517	6,758	6,986
Farm employment	1,208	1,217	1,200
Nonfarm employment	26,942	27,282	27,431
Private employment	19,617	19,839	19,995
Forestry, fishing, related activities, and other (other includes US residents hired by foreign organizations)	177	206	(D)
Mining (withheld for disclosure)	164	218	(D)
Utilities (withheld for disclosure)	(D)	(D)	(D)
Construction	1,652	1,653	1,642
Manufacturing	2,524	2,356	2,280
Wholesale trade	695	673	647
Retail trade	3,736	3,783	3,757
Transportation and warehousing (withheld for disclosure)	(D)	(D)	(D)
Information	286	278	272
Finance and insurance	755	751	797
Real estate and rental and leasing	688	702	729
Professional and technical services	1,136	1,165	1,165
Management of companies and enterprises	33	37	38
Administrative and waste services	609	728	742
Educational services	229	255	263
Health care and social assistance	2,396	2,465	2,524
Arts, entertainment, and recreation	454	479	479
Accommodation and food services	1,934	1,866	1,990
Other services, except public administration	1,574	1,666	1,692
Government and government enterprises	7,325	7,443	7,436
Federal, civilian	163	160	157
Military	121	121	117
State and local	7,041	7,162	7,162
State government	3,178	3,239	3,233
Local government	3,863	3,923	3,929

Source: Bureau of Economic Analysis.

Availability

The current agricultural workforce of 1,200 wage and salary earners is nearly unchanged since 2001 when there were 1,208 reported employees in agriculture. Today, that population equals approximately 1.34% of the private sector workforce and approximately 1.07% of the total workforce. This proportion changed little over the last decade, declining only by .2%. This level of stability in the workforce indicates that a ready labor force is available to farmers, or that the total agricultural workforce is capped at approximately 1,700 to 1,800 workers locally. Based on interview results, it is likely

that the near continual growth in Livingston County's Hispanic workforce provides a constant and renewed source of labor, even though this is a small percentage of the overall labor force.

Training and Educational Attainment

Given agriculture's diminishing share of Livingston County's economy, accessing specialized workforce training can be a challenge. This is true at all levels of employment from non-skilled labor through management. Cornell Cooperative Extension, both locally and regionally, as well as certain industry associations, do offer courses and seminars to bridge this gap. It was indicated that these courses are not always well attended and that course scheduling in some cases made broad attendance difficult. As the local workforce continues to develop skills outside of agriculture, it will become more important to address this issue. This is particularly true in light of expected trends in farm entrepreneurship whereby entirely new entrants to farming will likely enter the market with few production and management skills. In some cases, these individuals will only speak English as a second language.

Quality and Cost

Overall, farmers seem pleased with the quality of the workforce as well as the prevailing wage rate of approximately \$8.50 to \$12.00 per hour⁸. Farmers generally consider the quality of the workforce to be high, but concerns over language skills, agricultural background, and life skills (particularly as they relate to the local youth labor force) are not uncommon. Furthermore, retired farmers provide a solid and well-qualified part-time workforce.

3.4 MARKET ACCESS

As noted earlier, Livingston County has proximate access to the high value metropolitan markets of the northeastern United States within a day's drive. However, the more immediate market area, which includes the City of Rochester, is much smaller and less wealthy. The opportunities presented by these markets can and does have an impact on market potential. Key characteristics of these markets are identified as follows.

⁸ Hourly rates are based on in-county interviews and labor reporting services. It does not include the value of benefits when they are offered.

Demographic Characteristics

Approximately 1.1 million consumers live within a 40-mile radius of Livingston County. These consumers are ethnically homogenous by U.S. standards with nearly 90% classified as white and generally drawing less than the national per capita income. As one would expect, such a market does not have above normal food marketing opportunities. Instead, retail opportunities are generally driven by cost considerations. Looking beyond the local market, Livingston County has proximate access to 5% of the nation's population within a 200-mile radius and 50% of the nation's population within a 750-mile radius.

Within these easy distribution distances, there are significant market opportunities presented by both the consumer type and the structure of the marketplace. Some of these opportunities are highlighted in Table 3.4.

Table 3.4: Selected Demographic Information 2000 & 2004

	40-Mile Market Counties	200-Mile Market Counties	Northeastern U.S.
<i>Selected Demographic Factors (2000)</i>			
Population	1,152,342	12,963,530	59,594,378
Diversity Index	32.6	22.5	49.4
Percent Asian	1.8%	1.1%	4.0%
Percent Hispanic	4.0%	2.7%	9.8%
Households	44,178	5,065,147	20,285,622
Median Household Income	\$42,585	\$38,179	45,482
Average Household Expenditures on Food At-Home	\$4,323.61	\$4,183.83	\$5,398.18
Percent of National Average At-Home Food Expenditures	93%	88%	114%
Average Household Expenditures on Food Away from Home	\$2,894.26	\$2,801.62	\$3,681.19
Percent of National Average Away from Home Food Expenditures	93%	87%	114%
<i>Retail Marketplace Conditions (2004)</i>			
Retail Food Sales	\$1,684,250,262	\$17,142,430,246	\$73,588,518,592
Grocery Stores	\$1,567,159,837	\$15,812,428,519	\$63,173,769,434
Specialty Stores	\$44,052,791	\$580,691,631	\$3,137,882,726
Retail Food Demand	\$1,848,434,995	\$19,120,779,615	\$105,178,669,907
Grocery Stores	\$1,687,200,696	\$17,060,179,123	\$90,240,820,587
Specialty Stores	\$51,685,627	\$654,474,424	\$5,346,721,158
Surplus Food Demand Potential	\$164,184,733	\$1,978,349,369	\$31,590,151,315
Grocery Stores	\$120,040,859	\$1,247,750,604	\$27,067,051,153
Specialty Stores	\$7,632,836	\$73,782,793	\$2,208,838,432

Source: ESRIBIS, 2005.

Conclusions that can be drawn from market access data are that farmers in Livingston County can have access within a day's drive to some of the best consumer markets in the United States, including the coveted New York Metropolitan market. However the distance to such markets requires a wholesale approach to sales. Given the size of the

market opportunity, such as the specialty food's surplus demand potential of \$2.2 billion, some attempt to penetrate these markets may be attractive.

Making these markets more attractive are the concentrations of ethnic populations. This is particularly true given the distinguishable differences in purchasing patterns among ethnic minorities. Particularly, Hispanic Americans, a very large population in the Northeast, tend to have discreet food purchasing patterns that may lead to marketing opportunities. Some characteristics of the Hispanic market segments include the following:

- The Hispanic market is the largest and fastest growing segment in the United States (13% of U.S. population) and the Northeast.
- Hispanic purchasing power is increasing dramatically (160% since 1990).
- Hispanic populations tend to purchase more raw products and prepare more meals at home. Sixty-seven percent prepare meals from scratch and only use 9% convenience foods in preparing meals.
- Shoppers in this segment shop for fresh foods more frequently than any other ethnic segment, averaging 4.7 visits per week. Overall, U.S. shoppers average 2.2 visits per week.
- Hispanic buyers tend to shop at specialty food stores more than other segments.
- Hispanics tend to be highly price sensitive, and very aware of product quality.
- Shoppers highly value Spanish language services and selections of ethnic specialty produce.
- Hispanic shoppers spend \$117 per week on grocery expenditures versus the U.S. average of \$87 per week.

Beyond Hispanic markets, the Northeast region's growing Asian population is proving to have distinct purchasing patterns that include higher value added food purchases. These foods include fresh cut as well as frozen foods based on recent research conducted by IRI.

While Livingston County farmers are not close enough to this market to benefit from direct retail market opportunities, they have a transportation advantage over farmers in other parts of the U.S. to access these markets. For instance, most of the New York City Metropolitan market area is within a 250 radius of Livingston and has well-established wholesale and retail markets by which local farmers can enter the market.

Local markets, however, do not have the same market appeal as the Northeast. Market diversity is limited, incomes are low, and markets tend to be price sensitive. There are some obvious opportunities to explore in the local market given the potential \$165 million demand surplus in the 40-mile market area.

Wholesale Marketing Opportunities

As identified previously in Section 3.2, the market area is well supported by traditional wholesale marketing infrastructure. As described in Table 3.5, the market area also supports the potential for a broad, but shallow, range of direct market oriented wholesale opportunities such as direct sales to independent operators (e.g., restaurants, retailers, and health food stores).

Table 3.5: Inventory of Select Businesses in Market Area, 2nd Quarter 2002

Description	SIC Codes	Livingston County # of Firms	Regional Counties # of Firms
Fruit and Vegetable Oriented Establishments			
Restaurants (Ethnic, Independent, Health Food)	5812-01, Parts of 5812-05 & 5812-99	94	839
Fruit and Vegetable Markets	5431	18	164
Health Food and Gourmet Retailers	5499-01, Parts of 5499-99	40	258
Grocery Stores (Independents, Coops, and Small Chains)	5411-00, Parts of 5411-99	142	996
Meat Markets	5421-00 & 02	11	146
Nursery, Greenhouse, and Horticulture Oriented Establishments			
Landscapers (Installers & Designers)	Parts of 0781-01, 0781-02, 0782, 0783-01	246	1,834
Garden Centers (Primarily Independent)	5261-00, 5261-03	21	173
Florists	5992	74	522

Source: Dun and Bradstreet, I-Market.

Based on interviews with retailers and farmers, the opportunity for wholesale direct marketing is limited to a subset of farmers that is able to identify and accommodate the needs of specific markets such as the local Hispanic market or the nearby Muslim markets in Cleveland, Toledo, and Detroit. It is the opinion of the project team and those interviewed, that this market opportunity is often misunderstood and poorly approached.

Despite the existence of these opportunities, farmers must not forget that volume requirements are often low, distribution systems difficult to establish/maintain, and that direct market wholesale requires the type of active personal involvement typically found in retailing. These opportunities do not suit the large scale of the area's growers and are often too distributed to be financially viable for small growers.

3.5 FARM OWNERSHIP AND TENURE

It is important to understand the structure of farm ownership, operator characteristics, and the critical drivers of farmland conversion in order to motivate an Agricultural and Farmland Protection Plan.

Operator Characteristics

Livingston County, counter to regional trends, has maintained a relatively constant average farmer age of approximately 54 years of age since 1997. Most agricultural areas have seen a steady increase in the age of farmers. This, combined with an increased share of farmers in the under 55 years of age bracket, indicates the farmers are being replenished at a rate close to the retirement rate. Given that 15% of farm operators are over the age of 70, having a high replacement rate is valuable. This is not the case in many areas of the State where the average age of the farmer rises on a regular basis.

In addition to a balanced replacement rate, more operators are making farming their primary occupation. The share of operators with farming as a primary occupation has been rising at approximately 1% a year and is slowly approaching the State average of 61%. This indicates some degree of confidence in the economic future of agriculture and is consistent with trends in consolidation.

Table 3.6: Selected Farm Operator Characteristics

Operator Characteristics	Livingston County				New York State	
	2002		1997		2002	
	Total	% Total	Total	% Total	Total	% Total
Total Farms (Number)	801	100%	750	100%	37,255	100%
Average Age	54.1		53.9		54.1	
Operator by age Group						
54 and Younger	454	57%	398	53%	20,319	55%
55 and Older	347	43%	352	47%	16,936	45%
Operator by Place of Residence						
On-Farm	674	84%	627	84%	32,986	89%
Off-Farm	127	16%	95	13%	4,269	11%
Principal Occupation						
Farming	447	56%	381	51%	22,665	61%
Other	354	44%	369	49%	14,591	39%
Operators by Gender						
Male	684	85%	662	88%	31,583	85%
Female	117	15%	88	12%	5,672	15%

Source: 2002 Census of Agriculture.

Other operator characteristics of note include an increasing percentage of female operators.

Land Tenure

In terms of farm numbers and acres, an increasing number of Livingston County farms are fully owned by the operator. This represents a slight shift from the use of rented and partially owned land for farming and underscores the consolidation that some farms are undergoing. The share of farmer owned land is consistent with the statewide pattern and indicates that farmers are making an investment in land.

Despite the trend, significant land resources are held in partial ownership. As is often the case, ownership is frequently split among family members, many of whom no longer farm, followed by land speculators, and others. The risk inherent in this condition is that as landowner interests change, farm operators may not have the ability to maintain control over their productive capacity. This trend has important implications for on-farm investments in plant and capital equipment, as farmers in a partial ownership, or tenanted situation, may be reluctant to make significant sunk cost investments in property that they do not control. Based on interviews, this issue is not currently a significant concern to most Livingston County farmers, but many realize that the situation may change in the future, especially if development pressure increases.

Farms in Livingston County also seem more likely than their New York counterparts to be under corporate legal structures. This fact is significant for several reasons. First, the corporate form of ownership facilitates intergenerational transfer by reducing the estate tax burden on succeeding generations. Second, it is the experience of the study team that corporate farms are more likely to transfer management to a younger generation at an earlier stage than are sole proprietors. However, high corporate ownership of farms may also indicate the presence of speculative investors in agricultural lands.

Table 3.7: Selected Farm Tenure Characteristics

Tenure Characteristics	Livingston County				New York State	
	2002		1997		2002	
	Total	% Total	Total	% Total	Total	% Total
Total Farms (Number of)	801	100%	750	100%	37,255	100%
Total Farms (Acreage)	209,496		209,782		7,660,969	
Legal Structure						
Sole Proprietorship	691	86%	644	86%	32,654	88%
Partnership	54	7%	70	9%	2,846	8%
Corporation	47	6%	35	5%	1,581	4%
Other	9	1%	1	0%	174	0%
Type of Interest						
Full Owner (Farms)	561	70%	477	64%	24,722	66%
Full Owner (Acres)	77,909	37%	69,077	33%	3,164,333	41%
Part Owner (Farms)	216	27%	230	31%	11,040	30%
Part Owner (Acres)	121,313	58%	129,398	62%	4,239,548	55%
Tenant (Farms)	24	3%	43	6%	1,493	4%
Tenant (Acres)	10,274	5%	11,307	5%	257,088	3%

Source: 2002 Census of Agriculture.

In terms of land rental, interviews indicated that good quality soils bring significant farmer interest when they become available, but that prices most often reflect the underlying agricultural value and/or carrying cost of the property.

3.6 PROFESSIONAL AND TECHNICAL BUSINESS SUPPORT

Interviews confirmed that professional and technical services are still available to farmers and agribusinesses throughout the region. These include specialized professional services, such as legal and accounting, and are familiar with agricultural operations.

Public Sector Service Providers

As with most New York communities, Cornell Cooperative Extension is the primary public sector service provider for the agricultural industry. Livingston County has a relatively small Cooperative Extension Association that provides targeted services to nearly all industry sectors. For those services that are not available at the local extension office, a regional network is in place that taps expertise in surrounding counties. Business development services are among those offered on a regional basis and provided out of Extension's Mount Morris office. However, a growing number of producers are bypassing the county system and dealing directly with research specialists at Cornell, Penn State, and other universities. Reasons given for this included the greater specialized knowledge of University faculty and faster response time for over the phone information requests. This practice is particularly true of large farms.

Beyond the regional specialist, business development services are also provided by the Livingston County Development Group (LCDG) and are supported by the SUNY Small Business Development Center (SBDC) at the SUNY Geneseo campus. Based on interviews, small farmers and several start-up food companies have used the services of the SBDC in Geneseo. In addition to the current small business development services, The LCDG is leading a process to develop a local business incubator program that will provide more targeted services to growth oriented businesses. As agricultural operations continue to consolidate or transition to new types of agriculture, integration with such a program may offer significant developmental advantages.

Private Sector Service Providers

As in most New York Counties, most farm operators rely on industry associations, service providers, and other farmers as the primary source of technical service and field support. As the agricultural base consolidates, some of these services are handled in-house. This may make it more difficult for small and mid-sized farmers to receive this type of networked service.

Because Livingston County still has a strong agricultural core, many professional services such as veterinary, real estate, bookkeeping, accounting, and legal assistance remain available. One notable shortage is in work force services such as labor brokering.

3.7 FINANCIAL CAPITAL

Financial capital is an important component of any agricultural community providing support for the capital investments necessary to modernize operations and maintain competitive advantage. This is especially true where industry consolidation and innovation are hallmarks of the industry.

Livingston County is well served by sources of debt financing including all levels of traditional agricultural financing such as Farm Credit and the Farm Service Agency. Additionally, local and regional banks are also active lenders in this market especially given the entry of non-traditional farmers and horse operations. Recent issues with debt quality seem to have dampened some of the appetite for farm related debt, but the market remains competitive.

The greatest financing need in the region is for risk capital ranging from concept development funding through prototype development. A core of innovative farmers and agribusinesses in the area have undergone financing challenges as their projects have pushed the limits of traditional credit, but have been unattractive to venture capital. It is likely that a financing program that can bridge this debt-equity gap may be successful in the region.

3.8 ECONOMIC DEVELOPMENT POLICIES AND PROGRAMS

In many communities across the United States, agriculture is not recognized as a locally important industry sector and is frequently omitted from economic development planning. Livingston County is an exception because economic development officials recognize the impact of the industry, but is similar with no specific plan to deal with agricultural development issues.

Regional Cooperation

As was noted earlier in the infrastructure analysis of Section 3.2, agriculture in Livingston County, as well as the entire western New York area, is quickly becoming regionally integrated and will require regional cooperation to maintain competitiveness. This integration is nowhere more evident than in the land ownership and farming patterns found with the same farm operations owning and operating land throughout a large multi-county area. In fact, many of these farms are involved in equipment sharing and land swapping arrangements that are truly regional. The positive power of regional cooperation is also evident in the nationally recognized agritourism cluster based around the wineries of the Finger Lakes Region.

Similarly, regional farmers have cooperated on the development and management of numerous agricultural support industries such as ProFac, the vegetable processing cooperative, and the Upstate Milk cooperative, a nationally recognized innovator in the dairy industry. Public-private collaboration is also evident such as the Western New

York vegetable growers' collaboration with Cornell University at the Batavia vegetable research center.

The project team found little public sector driven regional cooperation on specific economic development projects for agriculture beyond Cornell's regional specialist programs. This is particularly true with government agencies that may effectively serve to attract or develop agricultural support industries to the region. Based on the project team's work in Livingston and other regional counties, the team feels that this is truly a lost opportunity, especially from a relocation and attraction deal flow generation standpoint.

Business Retention, Expansion, and Attraction Planning

In order to keep local and regional agribusiness sound, it is important to be actively engaged in business retention, expansion, and attraction (BREA) efforts. For agribusiness, this often means providing services that keep the agricultural infrastructure sound and the local policy environment supportive. As with other elements of economic development planning, Livingston County does not offer specific BREA programming that targets the agricultural industry. Through the Industrial Development Agency, the Livingston County Development Group is capable of supporting some or all of the BREA functions for agriculture. As agricultural development opportunities arise, the Industrial Development Agency is prepared to be a primary player.

Livingston County may also be facing several current and significant retention and attraction issues related to regulatory issues and community relations. The study team was presented several examples whereby agribusinesses and state, county, and local agencies were engaged in costly delays in development processes or were advised away from making a site selection in Western New York because of perceived anti-industrial sentiments and the perceived long development horizon. Local zoning and regulatory issues most often drove these conditions, but represent a trend in Western New York that ends up with the region being labeled as anti-industry.

During the course of this project, the County applied for and received approval for an Empire Zone. While this designation is too new to be evaluated, it will very likely have a positive impact on business attraction and development.

Business Development Programs

Livingston County does offer a variety of basic small business development programs that are equally applicable to farms as they are to other businesses. The programs are summarized below:

- **Small Business Services**
 - *Empire State Development Corporation* – Provides training, counseling, technical assistance, real estate services, loans, and grants to New York

businesses and businesses locating in New York. Empire State Development Corporation programs apply to agricultural operations.

- *Service Corps of Retired Executives (SCORE)* – Provides mentoring and counseling to all small businesses including weekly business seminars.
- *New York State Small Business Development Center (SBDC)* – Provides counseling and mentoring at SUNY Geneseo.
- *Cornell Cooperative Extension* – Provides one-on-one farm business planning and development counseling services on a regional basis.
- *Microenterprise Assistance Program* – Provides microenterprise training and counseling in Wyoming and Livingston Counties including microenterprise financing with a \$50,000 maximum loan amount.
- *Livingston County Development Group (LCDG) Business Incubator (proposed)* – The LCDG is engaged in a feasibility and planning process for a business incubator. Such as development could have a significant impact on alternative agribusiness development.

- **Small Business Financing**

- *The Genesee/Finger Lakes Regional Planning Council Revolving Loan Fund (RLF)* - Loans for job creation for eligible for profit businesses in the region. Maximum loan amount is \$200,000 with a maximum of \$20,000 per job created. Applications pass through the Livingston County Industrial Development Agency.
- *The New York Business Development Corporation (NYBDC)* - Provides long term financing to help small businesses across the State and is a privately owned financial organization funded by the banks. NYBDC works as a complement to conventional bank financing by providing term loans to companies that do not meet traditional financing requirements.
- *Livingston County Industrial Development Agency (IDA)* – Offers a wide range of business financing and incentive programs as well as tax programs (e.g., PILOT), and project development assistance. While the IDA does specifically focus on large projects, its primary driver is job creation.
- *Microenterprise Lending Program* – The LCDG operates a low to moderate income targeted microenterprise loan fund that can apply to agricultural enterprises.

- **Small Business Workforce Development**

- *Livingston County Office of Workforce Development* – Trains and matches displaced workers and prepares the local workforce with appropriate life and technical skills.
- *Livingston County Business Education Alliance* – Keeps an open dialogue between primary and secondary school systems to keep curricula updated to business needs and provide career awareness activities for students.

Transportation Issues

Livingston County does not provide a strong voice for farmers in transportation advocacy. This is particularly an issue with regard to transporting agricultural equipment on state, county, and town roads. In part, the issue deals with the training of law enforcement officials.

3.9 STAKEHOLDER AND COMMUNITY SUPPORT

Stakeholder and community support for the Agricultural and Farmland Protection Plan, as well as agricultural economic development initiatives, is high throughout the County largely due to three factors. First, the County remains a regionally recognized agricultural production area in large part because of its highly productive soils and strong livestock and field crop sectors. Second, agricultural input and output industries remain important to the local economy providing significant job opportunities and tax base. Finally, agriculture provides many of the County's scenic vistas that contribute to its high quality of life and serves as a source of attraction for Rochester area commuters.

The project team discovered that while the interest in enhancing agriculture seems nearly universal, there are often wide gulfs between the interest of community/policy leaders and the agricultural industry. Much of this is driven by a fundamental lack of understanding of the tools and programs that are available to support agriculture, as well as occasional poor communications between and among the industry, communities, politicians, and agencies. Given the fact that local support will be necessary to implement most economic development or land use policies, enhancing public support will be a critical element of success for the Agricultural and Farmland Protection Board to achieve.

3.10 IMPLICATIONS FOR THE AGRICULTURAL AND FARMLAND PROTECTION PLAN

The analysis of local conditions found the following issues to be of particular importance to Livingston County's agricultural industry:

Livingston County has many of the infrastructure assets in place that are necessary to leverage industrial growth. Livingston County has an excellent transportation infrastructure as well as the public utilities necessary to support targeted development initiatives. In addition, the agricultural infrastructure is strong and the County has very high soil quality, which support a continued agricultural industry presence.

Agriculture and support industries, by structure and market opportunity, will be export oriented. The opportunity to support and enhance agriculture will be industrial in nature and focus on exporting raw and finished commodity out of the County. Under current market conditions, it is unlikely that significant direct market opportunities will alter production and marketing practices.

Direct market and retail opportunities do exist for agriculture locally and regionally. Retail level opportunities are available to local farmers, but will be exploited best at the firm level, not the industry level.

Industry coordination, especially with public entities, can be improved to enhance both economic and business development opportunities in agriculture. Many of the basic elements are in place to support broad based economic development initiatives in agriculture. These elements, though, must be coordinated and directed in order to benefit the community and industry.

At the business development level, high innovation and entrepreneurship regionally lead to several opportunities to support both large and small-scale businesses. Supporting the integration of agribusiness into the feasibility analysis for a business incubator offers an opportunity to provide directed services and financing to start-up businesses. Supporting the development of a regional agribusiness investment entity would support later-stage, more sophisticated business development.

Land ownership and tenure changes indicate a strengthening relationship between farm operators and the base unit of production, soil. Over the last few years, farm operators have increased the share of fully owned agricultural land. This demonstrates that operators have some confidence in the future of the industry and are willing to invest in that future. In addition, the average age of farmers has not significantly increased, indicating that retiring farmers are being replaced.

SECTION 4: LAND USE SUMMARY

4.1 INTRODUCTION

Livingston County's agricultural industry is an economic stimulus and important employment base for the County. In 2002, there were 767 self-employed farmers and 1,200 farm employees in Livingston County.⁹ Agriculture is also the dominant land use in the County with 52% (209,496 acres) of Livingston County's land base in farm ownership or use.

The County's agricultural land base is a critical strategic asset for its land intensive farm businesses. This section analyzes land use trends for Livingston County and makes projections about future land use change and their implications for the County's agricultural industry. The following topics are reviewed in this section.

- Population Change
- Real Estate Market
 - Current Housing Characteristics
 - Real Estate Sales: 1993-2002
 - Realtor and Banker Interviews
 - Infrastructure Assessment
- Farm Trends
- Summary

4.2 POPULATION CHANGE

As noted in Table 4.1 and Figure 4.1, Livingston County has the 4th highest overall population in the 9-county Genesee/Finger Lakes region. The population increased a modest 3.1% between 1990 and 2000 (6th in the region). Despite being one of the larger counties in the region based on overall population, Livingston County has one of the lowest population densities – 7th in the region.

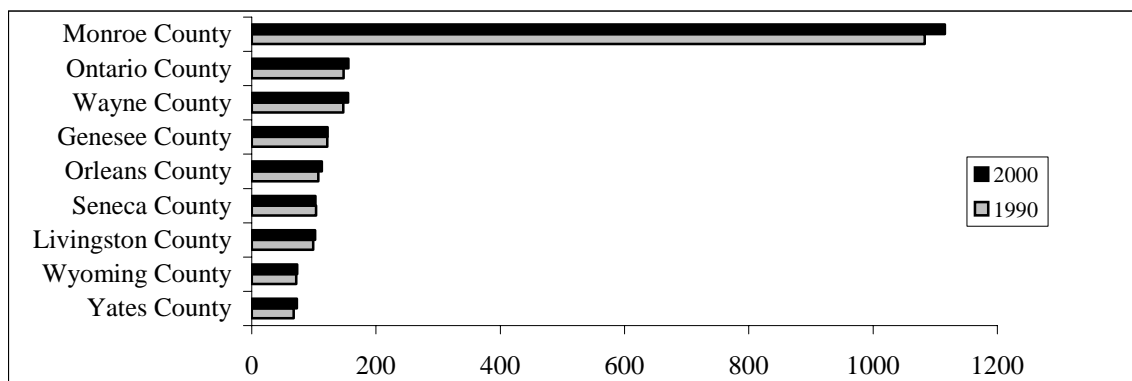
⁹ Source: Bureau of Economic Analysis – Regional Economic Information System.

Table 4.1: Livingston County Population Statistics

	Area (Sq mi)	Population		Population Density			
		1990	2000	1990	2000	Total Change	Percent Change
<i>Genesee County</i>	494.1	60,060	60,370	121.6	122.1	0.5	0.5%
<i>Livingston County</i>	632.2	62,372	64,328	98.7	101.8	3.1	3.1%
<i>Monroe County</i>	659.3	713,968	735,343	1,082.9	1,115.3	32.4	3.0%
<i>Ontario County</i>	644.4	95,101	100,224	147.6	155.5	8.1	5.4%
<i>Orleans County</i>	391.4	41,846	44,171	106.9	112.9	6.0	5.6%
<i>Seneca County</i>	324.9	33,683	33,342	103.7	102.6	-1.1	-1.0%
<i>Wayne County</i>	604.2	89,123	93,765	147.5	155.2	7.7	5.2%
<i>Wyoming County</i>	593	42,507	43,424	71.7	73.2	1.5	2.2%
<i>Yates County</i>	338.2	22,810	24,621	67.4	72.8	5.4	7.9%

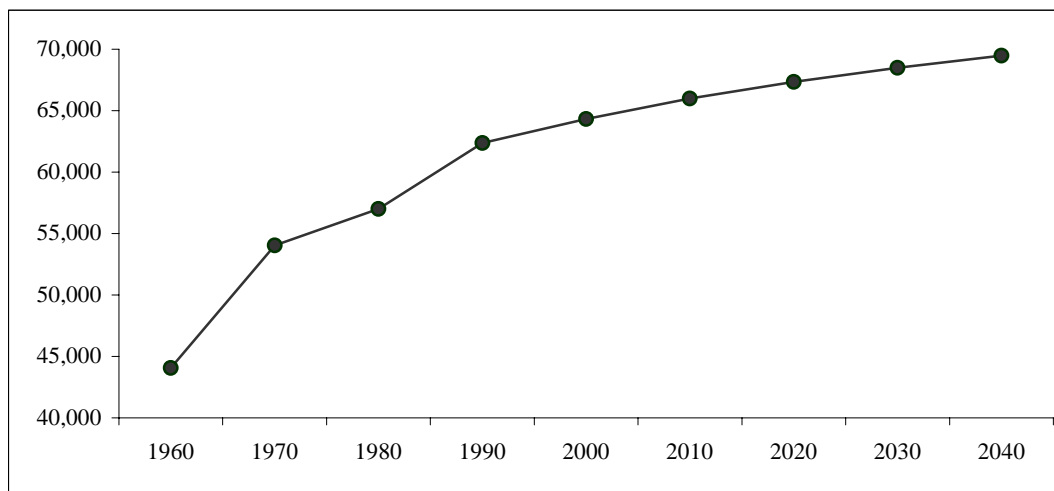
Source: 2000 U.S. Census.

Figure 4.1 Population Density Per Square Mile for the 9 County Genesee Finger Lakes Region



Livingston County's population grew by approximately 27% between 1960 and 2000 from 44,053 to 64,328 residents. The County's population growth rate was highest during that period between 1960 and 1970 (14% growth) and 1980 and 1990 (8% growth). However, it slowed considerably during the 1990's. The County's population is projected to increase by 8% between 2000 and 2040.

Figure 4.2 Livingston County Population 1960-2040



Source: Genesee/Finger Lakes Regional Planning Council.

Population trends have differed considerably throughout the County. Towns in the northern and eastern parts of the County have had and are projected to continue to have the highest population growth rates. Caledonia, Avon, Livonia, Conesus and Geneseo had consistently higher than County average growth rates from 1960-2000 and are projected to continue this trend.

By comparison, Towns such as Portage, Mount Morris and Ossian have experienced very slight population increases between 1960 and 2000. These communities – mostly in the southern and western parts of the County – are projected to continue to have only very modest population increases.

4.3 REAL ESTATE MARKET

Current Housing Characteristics

As noted in Table 4.2, Livingston County had 24,023 housing units in 2000, making it 5th highest among the nine Genesee Finger Lakes Counties in total housing units¹⁰. This housing base represents a roughly 4% increase in overall housing units from 1990 to 2000. Approximately 22,150 or 92% of these housing units were occupied in 2000.

Table 4.2: Housing Units by County

	Housing Units		Total Change	Percent Change
	1990	2000		
<i>Genesee County</i>	22,596	24,190	1,594	7.0%
<i>Livingston County</i>	23,084	24,023	939	4.0%
<i>Monroe County</i>	285,524	304,388	18,864	6.6%
<i>Ontario County</i>	38,947	42,647	3,700	9.5%
<i>Orleans County</i>	16,345	17,347	1,002	6.1%
<i>Seneca County</i>	14,314	14,794	480	3.4%
<i>Wayne County</i>	35,188	38,767	3,579	10.2%
<i>Wyoming County</i>	15,848	16,940	1,092	6.9%
<i>Yates County</i>	11,629	12,064	435	3.7%

Source: 2000 U.S. Census

According to the 2000 Census, 74.5% of occupied households are inhabited by owners while 25.5% are rental units. The census further indicated that 10.7% of all housing units were for sale and an additional 24.5% of all units were for rent in Livingston County in 2000.

Sprawl Without Growth: The Upstate Paradox

Cornell University's Dr. Rolf Pendall and the Brookings Institution recently completed a study entitled "Sprawl Without Growth: The Upstate Paradox" that analyzed development and population trends in Upstate New York during the 1980s and 1990s. The study found that despite very slow population growth between 1982 and 1997 in Upstate New York (2.6% increase for the period), 425,000 acres of farm and forestland in the region were developed. While Western New York "sprawled less" than other parts of Upstate during the period, 33,000 acres of farm and forestland were developed during the period despite a loss of 64,500 people. The study reinforced findings from other research that population spread – not population growth – is driving the loss of farmland in Upstate New York.

One measure of development patterns is the number of housing units per square mile. As Figure 4.3 demonstrates, the number of housing units per square mile differs considerably among Livingston County towns¹¹. In 2000, the Towns of Livonia, North Dansville, Avon, Conesus, and York had housing unit densities of greater than 25 units per square mile. By comparison, the

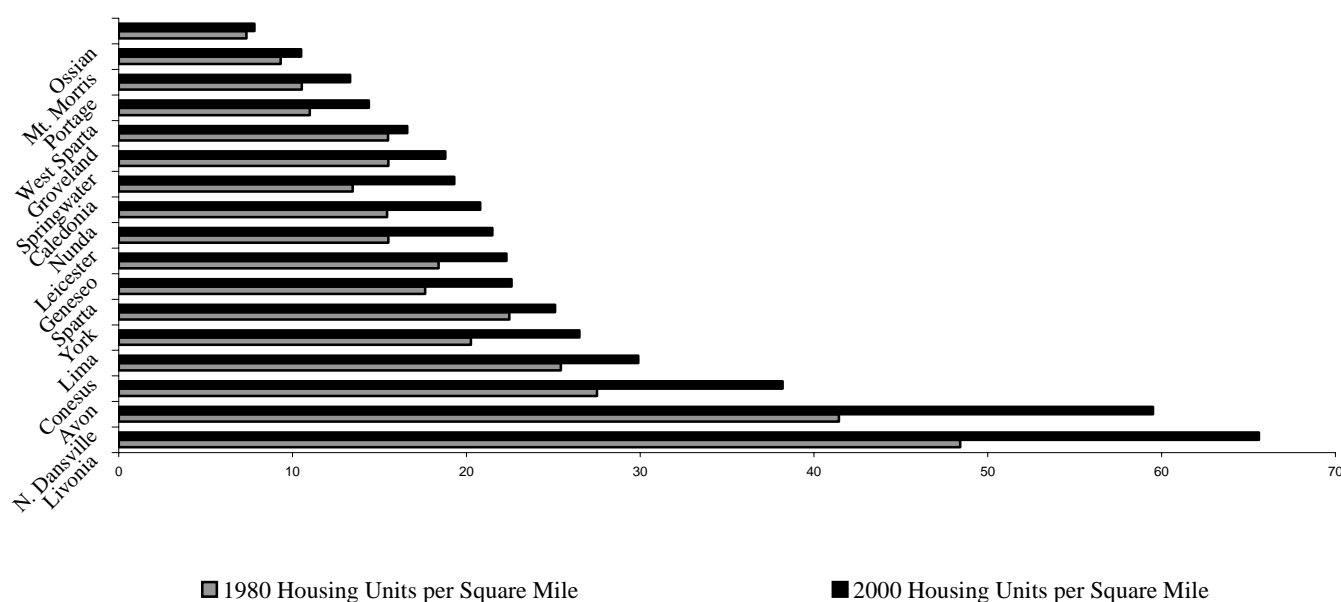
¹⁰ According to the U.S. Census Bureau, a housing unit may be a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or, if vacant, is intended for occupancy) as separate living quarters.

¹¹ Note that Figure 4.2 does not include village housing units in these estimates.

Towns of Ossian, Mount Morris, Portage and West Sparta had fewer than 15 units per square mile.

Between 1980 and 2000, significant increases in density were seen in North Dansville (44%), Caledonia (43%), Avon (39%), Leicester (39%), Livonia (36%) and Nunda (35%).

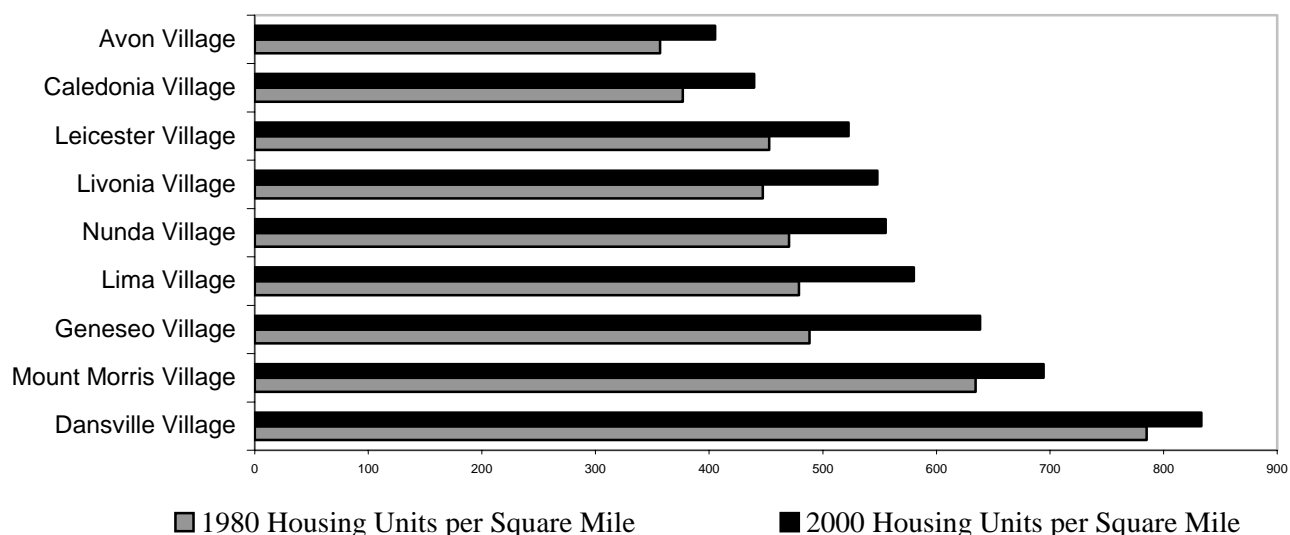
Figure 4.3: Housing Units Per Square Mile for Livingston Towns (Excluding Villages)



Source: US Census Bureau.

As noted in Figure 4.4, Livingston County villages have much higher housing unit densities than surrounding towns. Maintaining or increasing densities in villages and hamlets (compared with surrounding towns) is important for the retention of Livingston County's agricultural land base. All of Livingston County's villages increased housing density between 1980-2000 with the biggest increases experienced in the villages of Geneseo, Livonia and Lima.

Figure 4.4: Housing Units Per Square Mile for Livingston County Villages



Source: US Census Bureau

While all of Livingston County's villages increased housing density between 1980-2000, most of the County's villages lagged behind their associated towns for residential unit construction during this period. The biggest differences were experienced in the Town and Village of Livonia, Town and Village of Avon, Town and Village of Leicester and Town and Village of Nunda. Three villages – Geneseo, Mount Morris and Dansville – gained more residential units during this period than their associated town.

Table 4.3: Change in Residential Units, 1980-2000

Town	Change in Residential Units from 1980-2000	Associated Village	Change in Residential Units from 1980-2000
Avon	324	Avon	141
Caledonia	218	Caledonia	148
Geneseo	85	Geneseo	413
Leicester	190	Leicester	23
Lima	164	Lima	139
Livonia	457	Livonia	104
Mount Morris	47	Mount Morris	137
North Dansville	38	Dansville	72
Nunda	177	Nunda	86

Source: US Census Bureau.

The Influence of Nearby Monroe County

Neighboring Monroe County has been experiencing major population shifts that influence Livingston County and its agricultural industry. Between 1980 and 2000, the City of Rochester and adjacent Towns of Brighton, East Rochester, Gates, and Irondequoit have lost 29,000 residents. The surrounding suburban Towns of Pittsford, Perinton, Penfield and Webster gained almost the same number of residents (29,000) during the period. This suburban development has been spreading south into the Towns of Henrietta, Mendon and Rush and, to a lesser degree, Wheatland. Henrietta has seen the strongest development with over 1,100 residential building permits issued between 1998 and 2002. The Town of Mendon has also experienced significant population change with its population increasing by 54% between 1980 and 2000 and roughly 250 residential building permits issued between 1998 and 2002. This southern spread of suburban development pressure will likely influence Livingston County's northern Towns of Avon, Lima, Livonia and, to a lesser degree, Caledonia.

Development Projection Summary¹²

Livingston County contains approximately 205,000 acres of land available for development. There are currently between 149,000 and 194,000 undeveloped lots in Livingston County that can potentially be used for residential development. Of these lots, an estimated 1,200 are predicted to be developed by 2020, with an additional 900 lots by 2040.

The available square footage for future commercial development in Livingston County is approximately 12.7 million. By 2020, between 250,000 and 996,000 square feet are predicted to become subject to commercial development, with an additional 335,000 to 11.3 million square feet by 2040.

Approximately 39.7 million square feet are open for industrial development in Livingston County. Of this area, between 336,000 and 1.3 million square feet are estimated to undergo development by 2020. Between 448,000 and 1.7 million additional square feet are predicted to follow suit by 2040.

Realtor and Banker Interviews

Three realtors and three bankers from the following businesses were interviewed regarding their professional assessments of the land use trends in Livingston County: Farm Credit of Western New York, Five Star Bank (Formerly Wyoming County Bank), The Bank of Castile, Nothnagle Realty, Youngs & Linfoot Real Estate.

In general, there was consensus that the most productive soils are found in the northern half of the County along with a nucleus of production agriculture businesses. This is also the same part of the County that has the highest development pressure, largely residential, due to its proximity to the City of Rochester and the ease of travel to the City on Route 390. The southern half of the

¹² Information from this section is from a Regional Development Analysis conducted by the Genesee/Finger Lakes Regional Planning Council.

County has poorer soils in comparison to the northern half but does have many agricultural businesses with less development pressure. Most sales of agricultural land happen between landowners without realtor involvement and much of the agricultural land transactions are in the form of lease agreements rather than outright sales.

Although the majority of sales in the County are residential, the concentration of commercial sales and development is in the Geneseo area. A Wal-Mart Superstore was recently located there, and current plans include siting of a Lowe's store. Residential sales are highest in Avon, Geneseo, and Livonia and this is also the area of most new housing development. The land area surrounding Conesus Lake is well developed and many of the new homes being built are on parcels that contained an older, smaller home that was demolished and replaced. "Farmettes" (a house with some acreage) sell quickly and are difficult to find. Buyers are attracted to a house with acreage to serve as a privacy buffer or to use for horses or other hobby farm enterprises.

The Towns of York and Caledonia are heavily agricultural but agricultural land values are not as high there as in towns that have pressure from competing uses – mainly housing. Average agricultural land values in 3 sample areas of the County cited by one banker were: \$1,500-\$1,800/acre in the Towns of Avon and Livonia; \$1,200-\$1,500/acre in the Town of York; \$700-\$1,000/acre in the Town of Mt. Morris. One banker echoed the general trend for New York State agriculture as being the trend for Livingston County: fewer and larger farms, as well as more part time farms, niche farms, hobby farms, and horse farms.

Livingston County has a few unique land use characteristics that affect agricultural lands. One family, the Wadsworth family, owns a large amount of acreage in the County, particularly in the Geneseo area. The family is entrepreneurial and uses the land for a variety of purposes but they do manage a farm operation and do lease land to other agricultural operators. The Genesee Valley Conservancy (GVC) has extensive conservation easements on land in the Towns of Geneseo and Avon - some of which are leased by farmers. One of the oldest foxhunts in the U.S. takes place in the Geneseo area on land owned by individuals and with easements held by the GVC. The nature of the foxhunt requires private land ownership so this has contributed to the stabilization of the land base in the Geneseo area in the form of privately owned open space (not necessarily available for agricultural uses).

Infrastructure Assessment

Infrastructure such as roads, water, sewer, electric, gas and telecommunication services are critical to the success of the agricultural sector but can also play a role in accelerating non-farm development. The availability and price of electricity and other resources can significantly influence farm profitability. Additionally, farms depend upon safe and well-maintained roadways to move equipment, receive goods and services and ship farm products.

At the same time, infrastructure – particularly roads, water and sewer – often accelerates new development in rural areas. Without appropriate land use planning, infrastructure extensions can occur in a fiscally inefficient and haphazard manner and spur scattered new development in agricultural areas.

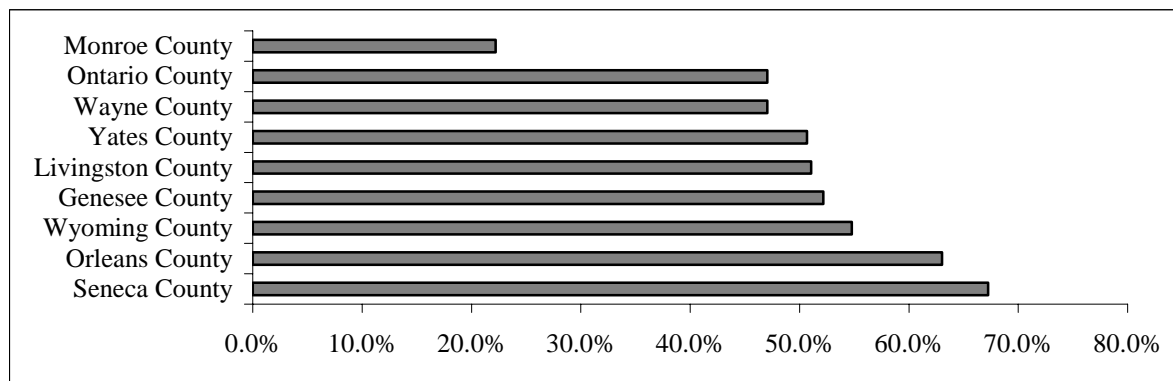
The Town of Mt. Morris has an identified commercial development corridor extending along a rail line on Mt. Morris Geneseo Road heading east. Both sewer and water are available as well as rail service. The corridor fronts large agricultural fields owned by two landowners who wish to keep the land in agricultural use. Soil quality in these fields is excellent. But, since the infrastructure is already in place, the pressure to convert the land to commercial uses is present.

The Livingston County Sewer and Water Authority has 3,000 water customers in the County. Some of the towns and villages use the Authority's water system and some have their own systems. The bulk of the water lines are found in the northern and central areas of the County where residential and commercial development are highest, and in the area surrounding Conesus Lake. In 1999, the Authority adopted construction guidelines and a lateral restriction policy for water transmission mains located in an Agricultural District: "The only land and/or structures which will be allowed to connect to the proposed waterline within the agricultural district will be existing structures at the time of construction, future agricultural structures, and land and structures that have already been approved for development by the local governing body prior to the filing of the Final Notice of Intent by the municipality." At the eight year review period, exceptions can be made for significant hardship by an existing resident and proven effort to be removed from an Agricultural District with denial to do so by the Livingston County Board of Supervisors. However, this condition has never been tested.

4.4 FARM TRENDS

In 2002, approximately 52% (209,500) of Livingston County's 404,608 acres were estimated to be in farm ownership or use.¹³ The County ranked 5th in the region in percent of the County's land base in farms as noted in Figure 4.5.

Figure 4.5: 2002 Percent of County Land Base in Farms



Source: US Census of Agriculture.

Land in farms of Livingston County includes cropland (78%), pastureland (4%), woodland on farms (13%), and house lots, ponds, etc. (5%). In 2002, 49,163 acres (approximately 23% of the County's land in farms) was rented farmland. If it is assumed that most of this rented land was cropland, rented land constituted almost 1/3 of the cropland in Livingston County in 2002.

Table 4.4: Farm Statistics from 2002, 1997, 1992, and 1987

	2002	1997	1992	1987
Cropland	154,705	162,152	161,254	182,648
Pastureland	10,873	7,621	8,034	10,642
Woodland on Farms	28,428	26,468	26,354	28,339
Land in House Lots, Ponds, Roads, Wasteland, etc.	15,490	13,541	9,463	12,442
Total Land in Farms	209,496	209,782	205,105	234,071
Proportion of County in Farms	52%	52%	51%	58%
Value of Land and Buildings Per Acre	\$1,461	\$1,123	\$993	\$867
Rented Land in Farms	49,163	55,665	58,535	59,028

Source: US Census of Agriculture.

In general, the stability of Livingston County's agricultural land base is consistent with other counties in the region. The four counties compared below are similar because they all have a proportion of area in farms of approximately 50%. Wyoming and Livingston Counties are very similar when comparing most data values listed below.

¹³ Includes pastureland other than cropland or woodland pastured. Total amount of pastureland for Livingston County was 24,479; 23,670; 26,367; and 34,197; for 2002, 1997, 1992, and 1987 respectively.

Table 4.5: Farm Statistics from 1997 and 2002

	Livingston		Wyoming		Genesee		Orleans	
	2002	Change 1997-2002	2002	Change 1997-2002	2002	Change 1997-2002	2002	Change 1997-2002
Cropland	154,705	-4.6%	151,257	7.1%	142,178	-5.1%	108,502	-15.5%
Pastureland	10,873	42.7%	11,912	8.8%	5,504	1.9%	2,648	9.1%
Woodland on Farms	28,428	7.4%	32,712	-5.2%	20,338	36.1%	14,682	14.5%
Land in House Lots, Ponds, Roads, Wasteland	15,490	14.4%	19,436	6.4%	9,350	-12.7%	7,115	-26.6%
Total Land in Farms	209,496	-0.1%	215,317	5.0%	177,370	1.9%	132,947	-13.3%
Proportion of Area in Farms	52%	0.0%	57%	5.0%	56%	-2.0%	53%	-13.3%
Value of Land and Buildings Per Acre	\$1,461	30.1%	\$1,341	19.1%	\$1,395	27.6%	\$1,241	10.8%
Rented Land in Farms	49,163	-11.5%	51,790	13.7%	44,228	-17.2%	37,664	-23.9%
<i>Source: US Census Bureau.</i>								

4.5 IMPLICATIONS FOR THE AGRICULTURAL AND FARMLAND PROTECTION PLAN

This analysis of land use trends and projections found the following issues to be of particular importance to Livingston County's agricultural industry:

Livingston County's agricultural land base is still relatively intact and is a competitive asset for the County's farm businesses. High development pressure that has impacted much of nearby Monroe County has had a limited impact on farmland in Livingston County – mostly along the Route 390 corridor.

Farmland is still affordable for purchase by farmers. The ability of farmers to acquire land is important as affordable farmland creates business opportunities for expanding farm operations or for the establishment of new farm enterprises.

Slow but steady land use change is projected for Livingston County. It is expected that this growth will be concentrated in the northern and eastern parts of Livingston County including:

- Avon
- Caledonia
- Town and Village of Geneseo
- Livonia

Towns bordering Monroe County and along the northern half of Route 390 will face growing pressures to become bedroom communities for the City of Rochester. Land prices will escalate as this pressure mounts. Farmers in these areas will have to pay higher land prices to compete with residential and commercial development for the available land. Affordable land is an important asset for expanding farm businesses and can help facilitate intergenerational farm transfers.

The lower density rural residential development expected to occur in Livingston County can still have a significant negative impact on farm businesses – particularly large livestock operations. Poorly planned, scattered residential development can bring new non-farm neighbors to the doorstep of farm businesses. These new neighbors may be unfamiliar with modern agricultural practices and can generate time consuming and potentially expensive conflicts. In many areas of the Country, this increased zone of conflict makes agricultural production difficult.

SECTION 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

Agriculture in Livingston County, New York is undergoing significant structural change as its traditional base transforms from mid-sized family farms to a bifurcated base of large consolidated agribusinesses and small, often equestrian focused, farms. The challenge faced by Livingston County is to put into place a proactive agricultural support program that can address the needs of the region's growing agribusinesses while leveraging community benefit. These benefits may come from the expected wealth generation that may accompany further consolidation or job creation that may come from attracting the service and support industries that are expected to gravitate toward the consolidated industry.

It is also important to keep in mind that this transition is occurring at a time when land development pressure emanating from the Rochester area is pressuring some of the County's best soil resources. While development is not yet at a pace whereby it is threatening the viability of agriculture, it is demonstrating a trend that could challenge agriculture in the future.

Based on analysis of empirical data and in-depth interviews conducted with industry leadership throughout Livingston County, the project team has identified the need for mixed economic development and business development programming. In order to support agricultural industry cluster development that fits the current state of the industry, the County should consider a combination of structural economic development programs, such as business retention, expansion, and attraction programming related to primary production sectors; recruitment or internal development of secondary market opportunities; broad based work force development; and infrastructure planning, as well as business development programming that specifically addresses the needs of individual agricultural enterprises. Furthermore, the County should be proactively encouraging towns to support the retention of the best soils and most productive farmland in a manner that supports local development objectives.

Key project findings that support this outcome include the following:

- 1. Livingston County is highly concentrated in a few sectors with the dominant sector, dairy, directly and indirectly accounting for nearly 75% of agricultural output.*
- 2. Among Livingston County's many unique assets is one of the State's highest concentrations of Prime and Productive Soils. These soils are highly suitable for vegetable and field crop production and generally considered highly developable.*

3. *Consolidation within key industry sectors is a regional phenomenon and is strengthening regional relationships within industry sectors.*
4. *Regional agricultural infrastructure is strong, but vulnerable to changing market dynamics. This is particularly true of the vegetable processing infrastructure.*
5. *The general economy in Livingston County lacks robustness in job creation and has little noticeable clustering within nonagricultural industry sectors. Agriculture provides an opportunity to develop a regionally significant cluster of related upstream and downstream businesses. The local workforce composition and transportation infrastructure are supportive of this type of growth.*
6. *The local workforce is currently conducive to agriculture with a competitive supply of low skilled and semi-skilled labor. Furthermore, the area maintains a relatively large blue-collar workforce with production, warehousing, and transportation related skills.*
7. *Though increasing, competition for land resources is not significantly driving up land values. However, the cost of holding land, including property tax rates and debt service, makes the opportunity cost for agricultural operators to own and hold land expensive relative to the returns generated by operations. To date, this carrying cost has not impinged on the ability of farmers to acquire highly valued soils, however, marginal ground is being fallowed or developed at a higher rate.*
8. *Due to myriad factors, including the above, intergenerational transfers of agricultural operations are becoming difficult.*
9. *Solid management skills and a strong sense of innovation are present in the region, providing a basis for strengthening the agricultural industry through entrepreneurship.*
10. *Despite strong stakeholder support for agriculture among most agricultural groups, environmentalists, and political jurisdictions, there are significant gaps in understanding among policy makers, regulators, farmers, and other agribusinesses. Misunderstandings include the proper policy responses to the needs of agriculture as well as the tools available.*
11. *The Livingston County Development Group is not an expert in agriculture or its development needs and will benefit from greater involvement by the AFPB in identifying and addressing such needs.*

Based on the above, as well as other analysis and findings presented throughout this report, the project team has assembled the following 13 recommendations.

5.2 ECONOMIC DEVELOPMENT RECOMMENDATIONS

Recommendations 1 through 5 address critical structural and industry-wide concerns that impact the long-term viability of agriculture in Livingston County. These solutions are based on current economic needs and opportunities and seek outcomes that have a direct benefit to the community through such effects as industry stabilization, job creation, enhanced tax base, and improved quality of life.

RECOMMENDATION 1

Develop an Agribusiness Retention, Expansion, and Attraction Plan

Livingston County is in a unique position to more fully develop its agribusiness input-output infrastructure. Based on current market conditions such as workforce composition, industrial development patterns, and access to primary east-west and north-south interstate systems, the County is well situated to develop value-added and distribution related agribusiness industry clusters. One of the primary impediments to developing such opportunities is the lack of a coordinated, inter-agency and inter-municipal efforts to retain, attract, expand, and develop such clusters.

ACTIONS

- Develop a targeted marketing plan focusing on strategic advantages of Livingston County:
 - Existing core of transportation assets and logistics businesses,
 - Strong agricultural production sectors,
 - Accessible infrastructure,
 - Positive environmental assets,
 - Available and qualified workforce, and
 - Supportive public sector.
- Assess existing incentives, economic development programs, and real-estate suitability for sectors outlined for recruitment and development.
- Identify key marketing partners and conduct outreach with generators of agribusiness deal flow:
 - Site location consultants and real estate brokers,
 - Business park developers,
 - Empire State Development,
 - Department of Agriculture and Markets,
 - Livingston County Development Group,
 - Trade associations, and
 - Agricultural industry.
- Prepare marketing collateral and disseminate critical decision making information through direct mail, industry “ambassador” programs, brokers’ tours, etc.
- Develop a pilot program for streamlining and/or fast-tracking agribusiness development projects with towns within the key transportation corridors or key environmental assets.

- Integrate the Agribusiness Retention, Expansion, and Attraction Plan (BREA) within broader economic development initiatives at the town, County, and State levels.

IMPLEMENTATION RESPONSIBILITY: Partnership of LCDG, Agricultural and Farmland Protection Board, Chamber of Commerce, Empire State Development, Cornell Cooperative Extension, and the New York Department of Agriculture and Markets.

BUDGET CONSIDERATIONS: The AFPB may consider allocating \$5,000 to facilitate the creation of a BREA component for agriculture within county economic development plans and to complete a target market study. Information from the study will be used to identify key prospects as well as an information packet to be distributed to site location firms, industry executives, economic development officials, commercial/industrial property owners, and real-estate brokers. Furthermore, the results of the target market study should be integrated into the marketing efforts for a broader economic development strategy for the County.

ISSUE PRIORITY: The study team considers this recommendation to be of top priority for the Agricultural and Farmland Protection Board given the current state of commercial and industrial development within the area.

FUNDING RESOURCES: Funding for this recommendation will likely require direct county allocation through the AFPB. Matching grants from various federal and state programs may be available such as USDA's Federal State Market Improvement Program, the Economic Development Administration, and USDA Rural Development.

RECOMMENDATION 2

Enhance Business Development Programs and More Fully Incorporate the Interests of the Agriculture Industry

The Livingston County Development Group (LCDG) has a proven track record with economic and business development support programs. This recommendation proposes to expand these programs within a targeted business incubation format. As well, general business development programs should incorporate the particular needs of agriculture and related industries with an effort to improve integration with private service organizations such as the Chamber of Commerce.

ACTIONS

- Seek expansion of LCDG role in agribusiness development.
- Support LCDG integration with the agricultural industry.
- Develop a feedback mechanism to incorporate agribusiness needs in county development programming.
- Support creation of a business incubator.
 - Develop a scope of services and timeline for the completion of a feasibility analysis for a business incubator:
 - Market feasibility,
 - Financial feasibility,
 - Management and organizational issues,
 - Site assessment,
 - Preliminary engineering, and
 - Business and marketing plan.
 - Seek funding support for feasibility analysis.
 - Conduct exploratory meetings with regional business developers and agribusiness entrepreneurs.
 - Integrate the incubator concept within the Agribusiness Retention, Expansion, and Attraction Plan.
- Support and expand Chamber of Commerce and other program activities that enhance business growth and understanding of agricultural industry needs.

IMPLEMENTATION RESPONSIBILITY: Partnership of LCDG, Agricultural and Farmland Protection Board, Chamber of Commerce, Empire State Development, SUNY Geneseo, and others.

BUDGET CONSIDERATIONS: The AFPB may consider supporting, through match funding of approximately \$35,000, a grant application with the LCDG to expand business development programs and to conduct an incubator feasibility study. Follow-on funding will only be necessary if positive progress with LCDG is made or if there is a positive market feasibility recommendation. Sufficient staffing must be allocated for concept development, grant writing, and project oversight.

ISSUE PRIORITY: Given the long development horizon for such a project and the expected potential of such a project, the study team considers this recommendation to be of moderate to high priority. Conduct of the feasibility analysis would ideally be contemporaneous with the development of a business retention, expansion, and attraction plan.

FUNDING RESOURCES: It is likely that a direct allocation from the County will be necessary to initiate this project. Funds from various programs may be available such as the U.S. Economic Development Administration, USDA Rural Business Enterprise Grant Program, Grow New York Enterprise Program, and the State's Food and Agriculture Industry Development Projects Program.

RECOMMENDATION 3

Expand Education and Training Programs

As agriculture becomes a smaller element of both the County's land use and economy, it will become increasingly difficult to keep the interests of agriculture in the forefront of policy. Study team members found that keeping policy makers, agricultural industry leaders, and the general public informed and educated goes a long way toward developing better relations. In addition, the agricultural industry has common needs in workforce development, farm management, finance, and other issues that can be met through public training resources.

ACTIONS

- Conduct training and outreach relative to economic development policy with a specific focus on agriculture, food, fiber, and related products.
 - Develop a policy makers' tour, to include key agricultural industry leadership, of areas with recognized and long-standing and successful agricultural development programs.
 - Hold periodic discussion sessions with town and municipal officials as well as agricultural industry leaders to discuss agricultural industry needs and policy impacts.
 - Conduct an economic development training session inviting agricultural industry leaders and county and town policy makers.
- Work with educational institutions at the post-secondary and continuing education level to develop flexible training modules for use by agricultural operations:
 - Language training for managers and workers,
 - Advanced farm management training,
 - Beginning farmer training, and
 - Other issue based training as necessary.
- Work with the public school system to integrate agricultural issues into primary and secondary schools' curricula and educational materials.
- Support the development of agricultural based continuing education training accredited for public school teachers.

IMPLEMENTATION RESPONSIBILITY: Action items under this recommendation require significant interagency cooperation with a range of potential task leaders. It is expected that overall leadership will be provided by the Agricultural and Farmland Protection Board and Cornell Cooperative Extension with assistance provided by agricultural industry associations, County Planning, SUNY, the New York Department of Agriculture and Markets, as well as other agencies.

BUDGET CONSIDERATIONS: Much of the workload encompassed within this recommendation will require dedicated staff time with a limited annual program budget of \$3,000 to \$5,000 to facilitate specific task/program development. On-going programs and events should be conducted on a cost recovery basis.

ISSUE PRIORITY: Elements of this task represent long-term on-going efforts that will become more necessary as farm conversion continues. Therefore, the study team feels that this is a high priority issue that should initiate within the first 24 months of plan adoption.

FUNDING RESOURCES: Funding for this recommendation will require modest, but long-term county support. Various private and public grant resources are available to support specific programs such as USDA's Sustainable Agriculture Research and Education Program. The Foundation Center should be consulted for specific private funding options.

RECOMMENDATION 4

Create an Outreach and Public Relations Program

An informed citizenry that understands and accepts the industrial nature of agriculture will make better neighbors and better consumers.

ACTIONS

- Identify key audiences/stakeholder groups that impact agriculture.
- Develop important message statements to deliver to above audiences.
- Produce collateral material and programming to outreach to various audiences:
 - Print material,
 - Media kit,
 - Television and radio programming,
 - Website, and
 - Special events.
- Create an agricultural speakers' bureau to carry the "message" to important community and civic groups through periodic public speaking engagements.
- Work with the public school system and youth programs such as 4-H and youth equine activities, to integrate the "message" of agriculture within the primary school system and youth training events.
- Produce a periodic editorial from the Agricultural and Farmland Protection Board to be published in local periodicals.
- Develop farm tours to support the "message" of agriculture as well as topical "on-farm" issues.
- Enhance the public relations network and partnerships with other agencies that have an active public outreach program.
- Foster greater agribusiness participation in cooperative advertising and marketing campaigns.

IMPLEMENTATION RESPONSIBILITY: Action items under this recommendation require significant interagency cooperation with a range of potential task leaders. It is expected that overall leadership will be provided by the Agricultural and Farmland Protection Board and Cornell Cooperative Extension with assistance provided by county planning, agricultural industry associations, as well as other agencies.

BUDGET CONSIDERATIONS: Much of the workload encompassed within this recommendation will require dedicated staff time with a limited annual program budget of \$5,000 to \$10,000 to facilitate specific task/program development. Specific project budgets will vary annually and may qualify for grant funding.

ISSUE PRIORITY: The study team feels that this is a moderate to low priority issue that should initiate within the first 36 months of plan adoption.

FUNDING RESOURCES: County funding should be allocated to cover basic program costs. Additional funding support should be sought from private sector sources such as Farm Credit, industry associations, Farm Bureau, and foundations. Grant funding for specific programs may be available, but program priorities for many funding agencies changes from year to year.

RECOMMENDATION 5

Develop a Regulatory and Policy Action Program

The stated policy of New York State, Livingston County and many of its towns and municipalities is to be supportive of agriculture and attendant industries. Yet, many policies and regulatory enforcement actions have inadvertent negative impacts on the industry. It is advisable to address this issue in a non-confrontational manner, as early in the process as possible to reduce these impacts.

ACTIONS

- Support expanded education and training programs (see Recommendation 3).
- Develop an on-going ombudsman function to support the regulatory, infrastructure, and program needs of individual farmers and industry clusters.
- Conduct periodic workshops with agricultural leadership, county staff and town/municipal officials to review and update policies making them more “farm friendly”.
- Work with the Department of Transportation and State Police on agricultural transportation issues.
- Conduct outreach with realtors to increase the understanding of Right-to-Farm protections and agricultural district responsibilities.
- Work to ensure fair treatment of both farm owners and agricultural labor at the federal and state levels.

IMPLEMENTATION RESPONSIBILITY: Agricultural and Farmland Protection Board with assistance from industry associations, Cornell Cooperative Extension, Empire State Development, Livingston County Planning, the New York Department of Agriculture and Markets, and other agencies as necessary.

BUDGET CONSIDERATIONS: Action items within this recommendation will require a limited administrative budget for local travel of approximately \$2,500, as well as a staff allocation.

ISSUE PRIORITY: The study team feels that this is a high priority issue that should be implemented in the near term.

FUNDING RESOURCES: County funding should be allocated to cover basic program costs.

5.3 BUSINESS DEVELOPMENT RECOMMENDATIONS

Recommendations 6 through 8 relate to improving conditions specific to the health and well being of local agricultural enterprises through training, business planning, network development, mentoring, finance, research and development support, and similar services. These recommendations are offered with an understanding that the overall health of the agricultural industry is intricately tied to the financial health of the underlying enterprises.

RECOMMENDATION 6

Support Entrepreneurship and On-Farm Skills Development

The success of any industry is incumbent on the success of the businesses and entrepreneurs that control the assets, take the risks, and make the markets. Agriculture in Livingston County is no exception and its long-term success will have as much to do with the savvy and skills of its agricultural entrepreneurs and farm managers as it does with market fundamentals. Enhancing the skills and business networks of these and future entrepreneurs has a significant positive impact on the future of agriculture in Livingston County.

ACTIONS

- Develop a pilot program to package a professional and technical service network made up of private sector expertise and built on the model of a virtual business incubator (See Recommendation 2).
- Implement, in cooperation with regional partners and Cornell University, the Nxlevel agricultural entrepreneurship or similar program.
- Develop a service corps of mentors and counselors with specific professional or technical expertise to provide direct service to agricultural entrepreneurs and to work with the County Small Business Development Center (SBDC) and Service Corps of Retired Executives (SCORE) programs (See Recommendation 2).
- Facilitate the development of formal “masterminding” roundtables of farmers, agribusinesses, and other related industries that may benefit from periodic meetings to discuss business and management issues, market development, and other relevant topics.
- Conduct quarterly brown bag lunches for farmers that focus on networking and the topical discussion of important issues such as farm management, farm transition planning, marketing, timber management, real estate, policy/regulations, and other relevant topics.
- Work with farmers to improve non-farm income sources such as on-farm agritourism opportunities, hunting leases and woodlot management.

IMPLEMENTATION RESPONSIBILITY: Partnership of LCDG, Agricultural and Farmland Protection Board, industry associations, Chamber of Commerce, Empire State Development, private businesses, higher education institutions, Cornell Cooperative

Extension, the New York Department of Agriculture and Markets, and other agencies as necessary.

BUDGET CONSIDERATIONS: Action items within this recommendation, exclusive of the pilot professional/technical service recommendation, will require a limited administrative budget of \$1,500 to \$2,500 and staff allocation.

Designing and implementing a well-qualified service network may take significantly more resources and is best integrated with Recommendation 2. Approximately \$25,000 should be allocated for the first program year followed by approximately \$10,000 to \$15,000 thereafter to operate and maintain the network.

ISSUE PRIORITY: The study team feels that this is a high priority issue that should be implemented in the near term. Development of the service network, however, is likely to take a significant time commitment, and the AFPB may choose to delay its implementation until sufficient staff time can be devoted to this project.

FUNDING RESOURCES: County funding should be allocated to cover basic program costs. On-going programs, such as brown bag lunches, should be conducted on a cost recovery basis. Development of the pilot services network may be an attractive project for national or regional foundations.

RECOMMENDATION 7

Support Broadened Access to Capital

Access to capital, and the attendant technical and professional networks that accompany it, are essential to the growth and development of an entrepreneurial community. The agricultural industry in Livingston County, and indeed the region, is no exception. Despite the active entrepreneurship evident in the agricultural industry, and the presence of wealthy individuals throughout the region, little risk, or patient, capital seems to be available to the industry.

ACTIONS

- Collaborate with statewide efforts to develop sources of “risk” and “patient” capital such as an agricultural angel capital network.
- Work with existing business finance programs to enhance agribusiness participation.
- Assist farmers with match requirements for agribusiness development, value-added, and innovation oriented grants.
- Examine the use of an affirmative agricultural use covenant¹⁴ (5, 10, or 20 year) to provide financial flexibility to farm owners and planning flexibility for towns and the County (See Appendix 8).
 - Pricing of covenants should be studied closely but may follow one of the following models:
 - Price may reflect property tax burden of holding the land.
 - Price may reflect a net present value of the purchase of development rights easement.
 - Covenants may be considered as part of the landowner match for purchase of development rights (PDR) programming.
 - Covenants may include a right of first refusal for purchase of the property for subsequent resale for an agricultural use.
- Develop a revolving loan program such as Carroll County, Maryland’s “Critical Farms” program that bridges the funding gap between farm purchase and enrollment in a PDR program by making a loan of up to 75% of the easement value.

IMPLEMENTATION RESPONSIBILITY: Agricultural and Farmland Protection Board with assistance from industry associations, Livingston County Development Group, New York Agridevelopment Corporation, town officials, and the New York Department of Agriculture and Markets.

BUDGET CONSIDERATIONS: Action items within this recommendation run a wide gamut of budget needs ranging from staff participation in regional planning efforts and

¹⁴ Affirmative covenant would require that farmers place a temporary easement on their property with an affirmative agriculture production clause in exchange for a formula payment.

network development to financing program development and operations. Basic program expenses are expected to run between \$5,000 and \$10,000.

If the AFPB is to proceed with the examination of an agricultural use covenant, it is recommended that an additional \$15,000 be sought for professional support services and matched by nearby Counties. Determining the level of capitalization for a bridge loan fund is best done in conjunction with planning the level and timing of funding for local, regional, and county purchase of development rights programs. Capitalization requirements are estimated to be a minimum of \$3 million.

ISSUE PRIORITY: The study team feels that developing alternative finance programs is a high priority issue that should be implemented in the near term.

FUNDING RESOURCES: County funding should be allocated to cover basic program costs. Grant funding should be sought from the New York Department of Agriculture and Markets to further explore the development of a model term easement program. Funds for a bridge loan program may be available through various federal and foundation sources such as USDA Rural Development.

RECOMMENDATION 8

Support Regional Agricultural Leadership Development

The long-term success of agriculture within Livingston County and the region are directly impacted by the quality of the industry's existing and emerging leadership. Specifically, the development of new leadership to set the vision for the future of agriculture is critical to the success of the industry over the long-term.

ACTIONS

- Encourage greater farmer participation in local, regional, and statewide leadership development programs.
- Introduce board and leadership training to existing agricultural organizations and agencies.
- Enhance inter-industry communications through formal networking events between farmers and agribusinesses.
- Support participation in LEAD NY through funding assistance.

IMPLEMENTATION RESPONSIBILITY: Agricultural and Farmland Protection Board with assistance from industry associations, Cornell Cooperative Extension, Livingston County Farm Bureau, town officials, and other agencies as necessary.

BUDGET CONSIDERATIONS: Action items within this recommendation will require a limited administrative budget and staff allocation. Provide funding assistance to LEAD candidates in the way of a modest, \$1,000 per year, stipend from the AFPB.

ISSUE PRIORITY: The study team feels that this is a top priority issue that should be implemented immediately.

FUNDING RESOURCES: County funding should be allocated to cover basic program costs.

5.4 LAND USE RECOMMENDATIONS

Recommendations 9 through 13 highlight programs that address the land use issues facing both towns and farmers.

RECOMMENDATION 9

Support Farm Friendly County Based Land Use Policies and Programs

Land use policy rarely treats agriculture as anything but a holding pattern for residential development and thereby frequently encourages the co-mingling of residences with this important economic use. Often these uses prove to be incompatible and the resulting change in regulations is frequently counter to the economic interests of agriculture. In fact, the long-term survival of agriculture may hinge on managing this inter-relationship as growth pressure mounts. Most agricultural land preservation tools rely on soils data as part of the ranking criteria. Currently Livingston County does not have up-to-date soil inventory and the existing survey has not been digitized, except for the Conesus Lake Watershed.

ACTIONS

- Improve coordination in the development of regionally significant infrastructure improvements and target future infrastructure siting away from agricultural areas.
- Work with towns to strengthen the Agricultural Districts in Livingston County through education, outreach, and training.
- Encourage the adoption, implementation, and promotion of County and or town Right to Farm laws. Any such effort should similarly encourage inclusion of a local agricultural dispute resolution process. (See Appendix I for sample legislation.)
- Work with local realtors to expand knowledge of NY Agriculture and Markets Law 25-AA.
- Improve interjurisdictional planning efforts to avoid unintended cross-jurisdictional effects such as development spillover, orphaned water and sewer improvements, etc.
- Complete a new soil survey and provide information in a format that will assist towns in agriculture planning via identification of the best soils in each town.
- Integrate soils data into the priority lands mapping formula.

IMPLEMENTATION RESPONSIBILITY: Agricultural and Farmland Protection Board, Livingston County Planning, NRCS, Cornell Cooperative Extension.

BUDGET CONSIDERATIONS: Action items within this recommendation will require a limited administrative budget and staff allocation. Approximately \$8,500 should be allocated for outreach activities. The costs of examining alternative funding and financing structures for PDR should be integrated within the open space plan. The cost of updating the soils survey is estimated at \$1 million.

ISSUE PRIORITY: The study team feels that this is a moderate priority issue.

FUNDING RESOURCES: County funding should be allocated to cover basic program costs.

RECOMMENDATION 10

Actively Support Town Based Agricultural Planning

Given the uneven agricultural land conversion pressure in Livingston County and the wide disparity of the natural resource base, town-based responses to agricultural land protection may have the most immediate affect on conversion pressure. This is especially true if the basic tenets of the County AFPB can provide guidance to the creation of town level plans.

ACTIONS

- Encourage and promote more comprehensive inclusion of agriculture in town level comprehensive planning which may include supporting town requests for state funding support.
- Provide County support through in-kind and cash match to town level applications for New York Agriculture and Markets technical assistance grants for Agricultural and Farmland Protection Plans, Quality Communities Grants, and other grant programs available for town level agricultural planning.
- Reach out to the towns during the agricultural district renewal process to inform them about the Agricultural and Farmland Protection Plan, as well as the benefits and requirements of the Agricultural District Law. Let the towns know how the Plan can positively impact businesses within their jurisdiction and how program elements may help them improve local processes and policies.
- Conduct formal training for town supervisors, town boards, planning boards, and zoning board of appeals members on land use law and best practices in planning as they relate to agriculture in support of proposed training mandates. Regional Local Government Workshops which are conducted twice a year by Genesee/Finger Lakes Regional Planning Council can be used to supplement this training.
- Support agriculture friendly development policies through incentives, infrastructure investments, and other methods that encourage in-fill development in villages and other already developed areas.
- Work with towns to review zoning and development requirements to assess impacts on the agricultural industry as well as input and output industries.

IMPLEMENTATION RESPONSIBILITY: Agricultural and Farmland Protection Board, Livingston County Planning. Genesee/Finger Lakes Regional Planning Council as a potential partner in training (GFL already provides local officials' with training in Livingston County. This training should specifically be enhanced to include agriculture.)

BUDGET CONSIDERATIONS: Approximately \$5,000 should be allocated for support activities.

ISSUE PRIORITY: This is a top priority issue.

FUNDING RESOURCES: County funding should be allocated to cover basic program costs through general funds.

RECOMMENDATION 11

Investigate Regional Efforts to Improve Rural Land Preservation Tools

By design, most agricultural land preservation tools are designed to be implemented where there is strong existing development pressure. In Livingston County, as well as surrounding jurisdictions, development pressure is often spotty, driven by commuter routes to nearby urban centers. This makes programs like Transfer of Development Rights and Purchase of Development Rights impractical in most places and raises the need for more practical, proactive tools for rural areas. Both Wyoming and Genesee Counties have advanced proposals to the State to accomplish this.

ACTIONS

- Examine Wyoming and Genesee Counties proposals to enhance agricultural districts and explore local applicability.
- Explore use of a county-based term easement modeled after California's Super Williamson Act.
- Work with regional partners to advance agriculture district enhancements and/or term easements at the State level.
- Integrate this recommendation with Business Development Recommendations.

IMPLEMENTATION RESPONSIBILITY: Agricultural and Farmland Protection Board, Livingston County Department of Planning, Office of Real Property Tax Services, Cornell Cooperative Extension.

BUDGET CONSIDERATIONS: Action items within this recommendation will require a limited administrative budget and staff allocation.

ISSUE PRIORITY: The study team feels that this is a top priority issue that should be implemented immediately.

FUNDING RESOURCES: County funding of approximately \$1,000 should be allocated to cover administrative costs.

RECOMMENDATION 12

Support a Purchase of Development Rights Program in the County

The agricultural land base is a critical asset for Livingston County's agricultural sector. Poorly planned and regulated development can lead to the permanent conversion of highly productive farmland to other uses and reduce the affordability of land for new or expanding farm operations. PDR provides farmers with a financially competitive alternative to development and can help slow the conversion of agricultural land to non-farm uses. Given the recent award to a Livingston County farm of \$1.4 million in State PDR funding, it is expected that PDR interest will rise.

ACTIONS

- Support the establishment of a purchase of development rights program in towns or by the County to maintain the balance of protected farmland within core production areas. If the County coordinates a program, give preference to PDR applications from towns with a town level plan supportive of agriculture or an otherwise clearly defined plan for agricultural support.
- Provide information to farmers and rural landowners about New York's Farmland Protection Program and USDA's Farm and Ranchland Protection Program.
- Use the Agricultural and Farmland Protection Plan ranking criteria to screen applicants.
- Support new funding opportunities for PDR such as the Community Preservation Act (legislation to enact a town real estate transfer tax for use in establishing local farmland and open space protection funds).

IMPLEMENTATION RESPONSIBILITY: Implementation responsibility will rest with Agricultural and Farmland Protection Board, Livingston County Planning, and local towns.

BUDGET CONSIDERATIONS: Action items within this recommendation will require a limited administrative budget of \$3,000 to \$5,000 and staff allocation. If a county Purchase of Development Rights Program is established, the County can provide in kind services and consider providing some cash match.

ISSUE PRIORITY: The study team feels that this is a top priority issue.

FUNDING RESOURCES: County funding should be allocated to cover basic program costs.

RECOMMENDATION 13

Promote Understanding and Appreciation of Livingston County Agriculture to the Non-Farm Public

Most people are multiple generations removed from any direct tie to production agriculture and their knowledge of modern day farming practices is limited. Often, the public does not understand what constitutes sound agricultural practices and this can lead to farmer-neighbor misunderstandings. In addition, the public does not have a clear understanding of the contribution that farms and the food industry make to local economies, nor do they appreciate the environmental benefits provided by farms. Educating the nonfarm public about agriculture can create a more supportive environment for farming.

ACTIONS

- Publicize the economic and environmental benefits of Livingston County farms. Have appropriate sections of the AFPP and other outreach materials available at public offices. Cornell Cooperative Extension, Soil and Water Conservation District, NRCS, FSA, and Planning should have publications designed for county residents available for distribution.
- Develop an outreach brochure for non-farm neighbors about farm practices. Possible topics could be: why farmers spread manure; what standards or legal requirements apply; what you can expect from farmers and what you should do if you have questions or concerns.
- Expand and improve events such as the annual Farm-Neighbor Dinner as well as adding new events appropriate to meet Livingston County's needs by evaluating models used in other areas of the State such as Saratoga County's Sundae on the Farm; Erie County's Family, Food, and Farm Tour; Genesee County's Local Decision Maker's Tour and others.

IMPLEMENTATION RESPONSIBILITY: Agricultural and Farmland Protection Board, Livingston County Planning, Cornell Cooperative Extension, Soil and Water Conservation District, NRCS, FSA, and the Livingston County Chamber of Commerce.

BUDGET CONSIDERATIONS: Approximately \$2000 to \$5000 should be allocated for brochure design and printing. Action items within this recommendation will require a limited administrative budget and staff allocation.

ISSUE PRIORITY: The study team feels that this is a medium priority.

FUNDING RESOURCES: County funding should be allocated to cover brochure development and printing costs.

5.5 PROGRAMMATIC CONSIDERATIONS

In order to implement the recommendations encompassed in Sections 5.2 through 5.4, it will be necessary for the Agricultural and Farmland Protection Board (AFPB) to have access to dedicated staff support provided through partner agencies such as the Livingston County Development Group (LCDG) and the Planning Department¹⁵. The annual work plan for this activity should reflect the priorities set by the AFPB in furtherance of the industry. As well, the AFPB should be charged with evaluating agency performance vis-à-vis attainment of strategic objectives and progress toward completing elements of the work plan on an annual basis. It is expected that the AFPB would require approximately \$75,000 in annual county budget support to operate basic elements of the program. Grant support and supplemental budget requests will be used to round out program resource needs.

It is also important to note that implementation of an Agricultural and Farmland Protection Plan is not unlike launching any other business or program. The process will take time and resources and outcomes will not be immediate. Early and sustained commitment from members of the AFPB is a minimum requirement for successful implementation. Keeping stakeholders engaged in the process during this period will be one of the greatest challenges facing the AFPB and any staff it may engage.

¹⁵ At the outset of the project, it would be sufficient to dedicate 25% full-time equivalent in each department to the annual work plan of the AFPB.

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5.6 BUDGET CONSIDERATIONS

Budget Estimates						
Recommendation	Total Estimated Cost	Possible Funding Sources				
		Internal Sources		External Sources		
		County	Local	Federal	State	Private
1. Develop an Agribusiness Retention Expansion and Attraction Plan	\$5,000 to \$20,000 Non-Recurring	\$5,000		\$5,000 to \$20,000		
2. Enhance Business Development Programs and More Fully Incorporate Agricultural Needs	\$35,000 Non-Recurring	\$5,000 to \$10,000		\$25,000	\$5,000	User Fees and Donated Services for Specific Needs
3. Expand Education and Training Programs	\$3,000 to \$5,000 Recurring	\$3,000 to \$5,000				\$500 to \$1,500 and Fee Based Training as Appropriate
4. Create an Outreach and Public Relations Program	\$5,000 to \$10,000 Recurring \$12,000 Non-Recurring	\$5,000 to \$10,000		\$5,000 to \$10,000	\$5,000 to \$10,000	\$1,000 to \$3,000
5. Develop a Regulatory and Policy Action Program	\$1,000 to \$2,500 Recurring	\$1,000 to \$2,500				
6. Support Entrepreneurship and On-Farm Skills Development	\$1,500 to \$2,500 Recurring for Business Support Services \$25,000 for Business Service Program Development Recurring	\$1,500 to \$2,500 \$5,000 to \$10,000		\$75,000		Fee Based Services \$25,000 Foundation Support
7. Support Broadened Access to Capital	\$5,000 to \$10,000 Recurring \$3 Million Loan Fund Capitalization	\$5,000 to \$10,000 \$.5 Million		\$2.5 to 3 Million in Grant Funding		\$100,000
8. Support Agricultural Leadership Development	\$1,000 Recurring	\$1,000				
9. Support Farm Friendly County Based Land Use Policies and Programs	\$8,500 Recurring \$1 million (Soil Survey)	\$8,500 \$75,000 per Year for Five Years		\$625,000	Possible Grant Support	\$500-\$1,000
10. Support Town Based Agricultural Planning	\$5,000 Recurring plus Dedicated Staff	\$5,000	Cash Match		Small Cities and Ag and Markets Grants as appropriate	
11. Investigate Regional Efforts to Establish Rural Land Protection Tools	\$1,000 Non-Recurring	\$1,000				
12. Support a County Purchase of Development Rights Program	\$3,000 to \$5,000 Administrative Support per Transaction Grant Preparation	\$3,000 to \$5,000		Project Funding Through Land Preservation Grant Applications		
13. Promote Understanding and Appreciation of Livingston County Agriculture to the Non-Farm Public	\$2,000 to \$5,000 Recurring	\$2,000 to \$5,000 Recurring				
Total	\$4,112,000 to \$4,145,000	\$626,000 to \$656,000		\$3,486,000 or higher depending on program availability		