RESOLUTION NO. 2015040

RE: AUTHORIZING CIRCULATION FOR DESIGNATION OF DUTCHESS COUNTY AS LEAD AGENCY WITH RESPECT TO THE REVIEW OF THE ADOPTON OF THE DUTCHESS COUNTY AGRICULTURAL AND FARMLAND PROTECTION PLAN PURSUANT TO 6NYCRR, PART 617, STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA).

Legislators MICCIO and PULVER offer the following and move its adoption:

WHEREAS, the New York State Department of Agriculture and Markets (NYS Dept. of Ag & Markets) recommended the Dutchess County Agricultural and Farmland Protection Board to update the Dutchess County Agricultural and Farmland Protection Plan adopted by the Dutchess County Legislature in 1998 in Resolution # 980039; and

WHEREAS, the NYS Dept. of Ag & Markets approved Dutchess County's request for a Farmland Protection Planning Grant in the amount of $50,000; and

WHEREAS, Dutchess County agreed to provide a matching grant in the amount of $50,000 as well as a $10,000 cash and "in kind" services from partner agencies; and

WHEREAS, various agencies have collaborated to create and produce the 2015 Dutchess County Agricultural and Farmland Protection Plan (Plan); and

WHEREAS, the Dutchess County Agricultural and Farmland Protection Board has reviewed the proposed Plan and on December 22, 2014, approved a Resolution (Resolution 01/2015) recommending the Plan's adoption by this Legislature and approval by the NYS Dept. of Ag. & Markets, and

WHEREAS, for a coordinated review, 6 NYCRR, Part 617, requires the designation of a lead agency from among the involved agencies before a determination of significance can be made, and

WHEREAS, it is the purpose of this Resolution, among other things, to authorize Dutchess County to seek lead agency status, now, therefore, be it

RESOLVED, that Dutchess County declares its intent to act as lead agency in connection with the above referenced Plan and the County Executive, or his designee, is hereby authorized to undertake the necessary steps to administer the environmental review of the project, including but not limited to circulation of a notice seeking designation of Dutchess County as lead agency.

CA-027-15
CAB/kvh G-1624
1/30/15
Fiscal Impact: See attached statement

STATE OF NEW YORK
ss:
COUNTY OF DUTCHESS

This is to certify that I, the undersigned Clerk of the Legislature of the County of Dutchess have compared the foregoing resolution with the original resolution now on file in the office of said clerk, and which was adopted by said Legislature on the 9th day of February, 2015, and that the same is a true and correct transcript of said original resolution and of the whole thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of said Legislature this 9th day of February, 2015.

CAROLYN MORRIS, CLERK OF THE LEGISLATURE

FISCAL IMPACT STATEMENT

☑ NO FISCAL IMPACT PROJECTED

APPROPRIATION RESOLUTIONS

(To be completed by requesting department)

Total Current Year Cost $ _____

Total Current Year Revenue $ _____
and Source

Source of County Funds *(check one)*: ☐ Existing Appropriations, ☐ Contingency, ☐ Transfer of Existing Appropriations, ☐ Additional Appropriations, ☐ Other *(explain)*.

Identify Line Items(s):

Related Expenses: Amount $ _____
Nature/Reason:

Anticipated Savings to County: _____

Net County Cost (this year): _____
Over Five Years: _____

Additional Comments/Explanation:

Environmental review of the Dutchess County Agriculture and Farmland Protection Plan has no fiscal impact.

Prepared by: Eoin Wrafter Prepared On: 1/30/15

Dutchess County Agricultural and Farmland Protection Board Resolution

Recommending Adoption of the Dutchess County Agricultural and Farmland Protection Plan by the Dutchess County Legislature and Approval by the New York State Commissioner Agriculture and Markets.

December 22, 2014

Whereas, the New York State Department of Agriculture and Markets encouraged the Dutchess County Agricultural and Farmland Protection Board to update *the Dutchess County Agricultural and Farmland Protection Plan* adopted by the Dutchess County Legislature in 1998; and

Whereas, the Department of Agriculture and Markets approved the Board's request for a Farmland Protection Planning Grant in the amount of $50,000; and

Whereas, Dutchess County agreed to provide the required match with cash and in-kind services from partner agencies; and

Whereas, the Dutchess County Agricultural and Farmland Protection Board has reviewed the *Dutchess County Agricultural and Farmland Protection Plan* produced by a Board-appointed Steering Committee in collaboration with Consultants Community Planning and Environmental Associates and partner agencies Cornell Cooperative Extension Dutchess County, the Dutchess County Soil and Water Conservation District, and the Dutchess County Department of Planning and Development; and

Whereas the Plan describes and recommends implementation of five primary Initiatives based on the Vision Statement and Goals identified during the public planning process with a particular focus on economic development, regional collaboration, resource protection, and education; and

Whereas, among other recommendations, the Plan encourages local municipalities to establish Agricultural Advisory Boards and encourages municipalities with agricultural resources and businesses to include representatives of the farming and agri-business community on their Planning and Zoning Boards; and

Whereas, the Plan also encourages Dutchess County municipalities to audit their Comprehensive Plans and Zoning Ordinances to insure that their regulations support local farm operations and related agri-businesses and do not interfere unreasonably with agricultural enterprises in their communities; and

Whereas, the Board supports the expedient implementation of these Initiatives by appropriate agencies and partners; therefore be it

Resolved, that the Dutchess County Agricultural and Farmland Protection Board recommends that the proposed Dutchess County Agricultural and Farmland Protection Plan be adopted by the Dutchess County Legislature and forwarded to the New York State Commissioner of Agriculture for review and approval.

	Yes	No	
Harry Baldwin, Chair	X		
Art Collings, Vice Chair	X		
Barbara Appolonia			Absent
Eric Axelsen	X		
Peter Coon	X		
Jennifer Fimbel	X		
Dave Fraleigh	X		
Edward Hackett	X		
Gregg Pulver	X		
Brian Scoralick	X		
Eoin Wrafter	X		

Approved by Dutchess County Agricultural and Farmland Protection Board
December 22, 2014

Harry Baldwin Chair — 1-10-15

Harry Baldwin, Chair — Date

Dutchess County Planning Board
Resolution 01/2015

Recommending Adoption of the Dutchess County Agricultural and Farmland Protection Plan by the Dutchess County Legislature and Approval by the New York State Commissioner Agriculture and Markets.

Whereas, the New York State Department of Agriculture and Markets encouraged the Dutchess County Agricultural and Farmland Protection Board to update *the Dutchess County Agricultural and Farmland Protection Plan* adopted by the Dutchess County Legislature in 1998; and

Whereas, the Department of Agriculture and Markets approved Dutchess County's request for a Farmland Protection Planning Grant in the amount of $50,000; and

Whereas, Dutchess County agreed to provide the required $50,000 match with $10,000 cash and in-kind services from partner agencies; and

Whereas, a Steering Committee appointed by the Dutchess County Agricultural and Farmland Protection Board, working in collaboration with Consultants Community Planning and Environmental Associates and partner agencies Cornell Cooperative Extension Dutchess County, the Dutchess County Soil and Water Conservation District, and the Dutchess County Department of Planning and Development, has produced the 2015 Dutchess County Agricultural and Farmland Protection Plan; and

Whereas, the Dutchess County Agricultural and Farmland Protection Board has reviewed the proposed Plan and on December 22, 2014 approved a Resolution recommending the Plan's adoption by the Dutchess County Legislature and approval by the Commissioner of the New York State Department of Agriculture and Markets; and

Whereas the proposed Plan describes and recommends implementation of five primary Initiatives based on the Vision Statement and Goals identified during the public planning process with a particular focus on economic development, regional collaboration, resource protection, and education; and

Whereas, among other recommendations, the Plan encourages local municipalities to establish Agricultural Advisory Boards and encourages municipalities

with agricultural resources and businesses to include representatives of the farming and agri-business community on their Planning and Zoning Boards; and

Whereas, the Plan also encourages Dutchess County municipalities to audit their Comprehensive Plans and Zoning Ordinances to insure that their regulations support local farm operations and related agri-businesses and do not interfere unreasonably with agricultural enterprises in their communities; and

Whereas, the Dutchess County Planning Board has reviewed the proposed Plan and supports the expedient implementation of the proposed Initiatives by appropriate agencies and partners; therefore be it

Resolved, that the Dutchess County Planning Board recommends that the proposed Dutchess County Agricultural and Farmland Protection Plan be adopted by the Dutchess County Legislature and forwarded to the New York State Commissioner of Agriculture for review and approval.

	Yes	No	Absent
Joel Diemond, Chair	✓		
James Nelson, Vice Chair	✓		
Colleen Cruikshank			✓
Michael Dupree	✓		
Edward P. Hauser	✓		
Hans Klingzahn	✓		
Warren Temple Smith	✓		
Jill Way			✓
Fredrick Wilhelm	✓		
J. Randall Williams			✓
John Weisman			✓

January 14, 2015

Joel Diemond, Chair

January 14, 2015
Date

Dutchess County

Agricultural and Farmland Protection Plan

January 2015

"It is an exciting time for agriculture in Dutchess County. I feel like my father must have felt during the 40s and 50s in the 'heyday' of farming. There are so many opportunities, some of which we never even thought of ten years ago such as farm-to-table, CSAs, breweries and distilleries. We even have new-to-the-area crops like hops and sunflowers. Farmers have a chance to utilize new technologies and opportunities for small and large scale farms. The future of agriculture in Dutchess County is growing!"

Gregg Pulver, Third Generation Farmer

Dutchess County Agriculture... It's A Growing Thing!

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Acknowledgements

Dutchess County Agricultural and Farmland Protection Board

Harry Baldwin - Chair
Art Collings - Vice Chair - Dutchess Land Conservancy
Barbara Appolonia - Magnificat Farm
Peter Coon - Coon Brothers Partnership
Eric Axelsen - Dutchess County Real Property Tax Agency
Jennifer Fimbel - Cornell Cooperative Extension Dutchess County
Dave Fraleigh - Rose Hill Farm
Edward C. Hackett - Agri-Business/Hackett Farm Supply Inc.
Gregg Pulver - Dutchess County Legislator, District 19
Brian Scoralick - Dutchess Soil & Water Conservation District
Eoin Wrafter - Dutchess County Planning and Development

Agricultural and Farmland Protection Plan Steering Committee

Dave Tetor - Committee Chair, retired Cornell Cooperative Extension Dutchess County Agriculture Educator
Harry Baldwin - Chair, Dutchess County Agricultural and Farmland Protection Board
Art Collings - Vice President for Land Conservation, Dutchess Land Conservancy
Jennifer Fimbel - Resource Educator, Cornell Cooperative Extension Dutchess County
Marilyn Howard - Advisor, Dutchess County Agricultural and Farmland Protection Board
Gregg Pulver - Farmer, Legislator District 19, Dutchess County Legislature
Brian Scoralick - Acting Executive Director, Dutchess County Soil and Water Conservation District
Eoin Wrafter - Acting Commissioner, Dutchess County Planning and Development,
Kealy Salomon - Former Commissioner, Dutchess County Planning and Development
Ed Hoxsie - Former Executive Director, Dutchess County Soil and Water Conservation District

Advisors

Neil Curri - Senior GIS Resource Educator, Cornell Cooperative Extension Dutchess County
Noela Hooper - Senior Planner, Dutchess County Planning and Development
Brian Kehoe - Planner, Dutchess County Planning and Development
Robert Wills - Senior GIS Project Coordinator, Dutchess County Planning and Development

Consultants

Community Planning and Environmental Associates (CP&EA) - Nan Stolzenburg, AICP CEP
Don Meltz Planning and GIS - Don Meltz, AICP
The Hudson Group, LLC - Ronald Miller and Dennis Rapp

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Table of Contents

Acknowledgements 2
Table of Contents 4
Section 1 - Introduction 6
Section 2 - A Summary of the 2014 Agricultural and Farmland Protection Plan 8
Brief Outline of the Planning process 8
Vision for Agriculture 9
Goals 9
Recommended Initiatives 10
Regional Perspective 15
Section 3 - Successes Since the 1998 Agriculture and Farmland Protection Plan 16
Section 4 - Agricultural Profile of Dutchess County 20
Highlights of the Agricultural Economy in Dutchess County 20
Mapping and Descriptions of Farms, Farmland, and Other Resources 24
Elements of the Food Supply System 42
Farmland Conversion Pressure 43
Agricultural Priority Areas 45
Section 5 – Existing Plans, Programs and Initiatives 48
County-Level Plans Relating to Agriculture 48
Regional Snapshot 49
Section 6 - Vision for Agriculture 55
Section 7 - Goals 56
Section 8 - Initiatives 57
Initiative 1: Create an Agricultural Navigator Position 57
Initiative 2: Develop an Agricultural Economic Development and Business Retention and Expansion Program 59
Initiative 3: Farmland Preservation and Accessibility Program 63
Initiative 4: Farm-Friendly Local Regulations 66
Initiative 5: Expand education and awareness programs. 68
Section 9 – Implementation 70
Section 10 – Appendices 73
Appendix 1. Terminology 74

Appendix 2. Profile of the Agricultural Economy in Dutchess County 75
Appendix 3. Outline of the Planning process 91
Appendix 4. Farmer and Public Input 93
Kick Off Meeting 93
Survey Results 97
Interviews 102
Appendix 5. Review of Planning and Zoning 104
Highlights of Zoning and Comprehensive Plan Review 104
Appendix 6. Agricultural Priority Area Identification Method 113
Appendix 7. Scenic Hudson's Foodshed Plan for New York City and the Hudson Valley 118
Appendix 8. Land Use, Regulatory and Other Resources 119
Model Right To Farm Law 119
Model Disclosure Notice 122
Model Agricultural Data Statement 123
Model Scope of Work of Local Agriculture Committee 124
Model Modified Site Plan Review Law 126
Appendix 9. Agricultural Assessment Program and Agricultural District Program 128
What are the differences? 128
Differences at a Glance 129
Appendix 10. Model Agricultural Coordinator (from Jefferson County) 130
Appendix 11. Inventory of Resources 132
County Agencies and Organizations 132
Regional Agencies and Organizations 133
New York State Agencies and Programs 134
Federal Government Agencies and National Programs 135
Municipal Plans 137
Virtual Food Hubs 137
Publications 137

Section 1 - Introduction

Agriculture has been and continues to be one of Dutchess County's primary industries. Our economy, rural landscape, community character, environment, health of residents, and overall quality of life are all uniquely and positively affected by farms operating here. Although agriculture has changed through time and continues to evolve and diversify, it plays a significant role in both the economy and quality of life for Dutchess County residents.

Dutchess County has seen significant changes in its agricultural economy since the adoption of the last *Agricultural and Farmland Protection Plan* in 1998. At that time the biggest concern was the continuing loss of farms and conversion of farmland into non-farm uses due to the high level of development pressure and to the lack of profitability of farm operations.

From the 1998 Plan, Executive Summary -

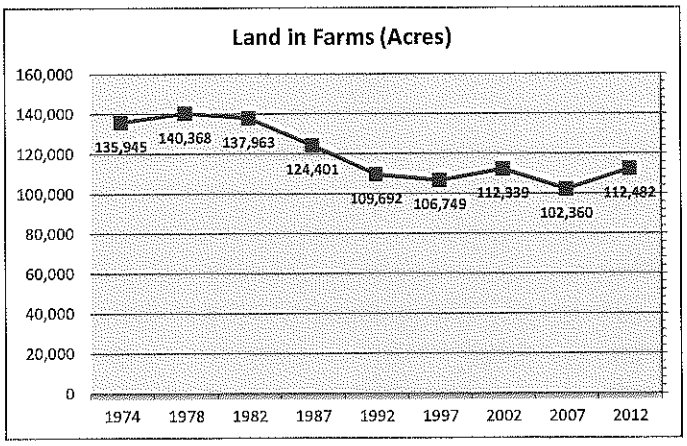
Dutchess County's location within commuting distance of New York City has put its beautiful rolling farmland in jeopardy of becoming housing developments...

This development trend has put Dutchess County's agricultural industry and farmland at risk - a risk we should all pay attention to...

Fifteen years later there are signs that the loss of farmland has slowed and the agricultural economy is rebounding. This is due in part to:

- the depressed housing market that followed the 2008 recession,
- the tremendous successes in preserving farmland after the adoption of the 1998 plan,
- the invigorated and renewed interest by young farmers in farming and the emergence of various groups that are assisting younger farmers with training and access to land,
- the continuous promotion of "buy local" and connection of Hudson Valley farmers with ever-expanding local and city markets, and
- the emergence of information technologies and farm practices that expand the opportunity for larger farms to operate profitably.

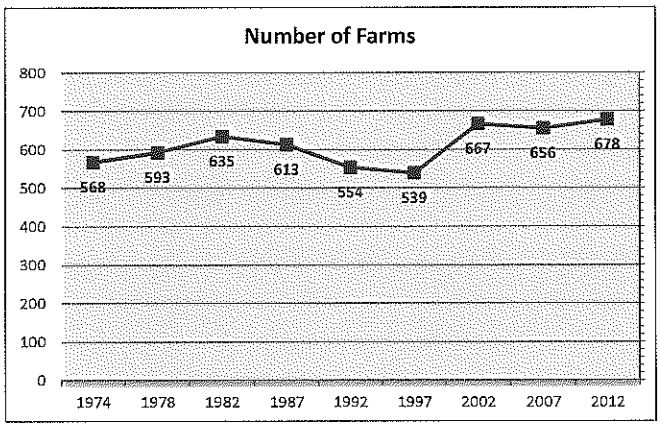
There are now excellent prospects for a continuing and vital agricultural economy, based on new markets, growing interest in local agricultural products, and opportunities for continued land preservation for the next generation of farmers. This Plan's purpose is to build on these strengths and successes.



Farmers and agriculture-related businesses in Dutchess County have continued to adapt to changing conditions in the economy and industry. The number of farms in Dutchess County is at a high point since 1974. The total number of acres in farming has been stable for the last 20 years, and is now actually higher than it was in 1992. More farms on an essentially stable land base means smaller sized farms but

average sales per farm also appear to be stable since the last plan was adopted in 1998 (See the Agricultural Profile section, Appendix 2).

Many long-established farms remain, and are growing in size and in profits. There is a newfound interest in locally produced foods on the part of consumers. New farms are starting with new farmers, and fresh ideas. Farmers are taking advantage of new technologies, and new ways of connecting with consumers. Farmers are becoming more integrated with the overall economy of the county, and the region. As the Cornell Cooperative Extension Dutchess County service mark says: "Dutchess County Agriculture... It's a Growing Thing℠".



Why is it a great time for agriculture in Dutchess County?

Here are some reasons:

- 678 farms produce everything from dairy and hops to wool and Christmas trees.
- The number of farms and acres used for farmland are increasing.
- There are over 211,000 acres of land reported as being farmed in the 2012 USDA Census of Agriculture.
- Farms contribute about $50 million in sales to the County economy.
- There are 15 farmers' markets in the County.
- The market value of agricultural products has increased 41% since 2007.
- Dutchess ranks #1 in the State in sales value of horses and ponies.
- Agri-tourism and direct sales are a growing part of agriculture.
- Over 44,000 acres of land in the County have been preserved for open space and agriculture.

Farms play an important role by providing:

- Fresh, safe, local foods and products to the County and region
- A sense of community and cultural identity
- The essential part of our community character
- A foundation for many tourism and recreational opportunities
- Open lands for wildlife
- Environmental protection through soil conservation, carbon sequestration, and conservation of biodiversity
- A quality of life that residents highly value

Section 2 - A Summary of the 2014 Agricultural and Farmland Protection Plan

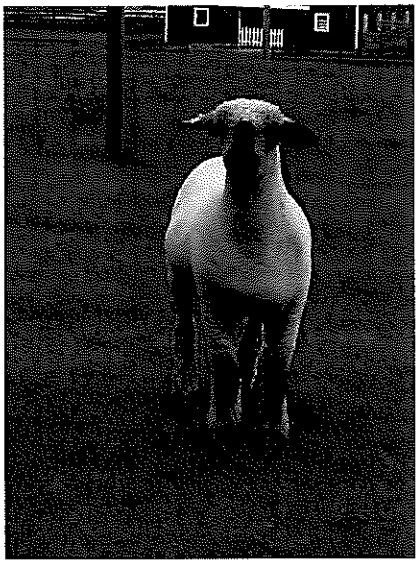
In 1998, Dutchess County adopted its first Agricultural and Farmland Protection Plan with the support of a Farmland Protection Planning Grant (FPPG) from the New York State Department of Agriculture and Markets. Given the dramatic changes that have occurred in the agriculture industry during the past 15 years, the Dutchess County Agricultural and Farmland Protection Board decided to develop a new plan, again with funding support provided by the State's FPPG Program and Dutchess County. The mission of the Steering Committee placed in charge of developing this new plan was to consider recent changes in agriculture, identify new needs and opportunities, evaluate past successes, and develop new strategies to use moving forward.

Dutchess County has an enthusiastic group of agricultural entrepreneurs who are passionate about farming. They are adept at finding new ways to solve old problems. Just as the farm producers have been able to change with the times, the agencies and government officials that support them must be able to adapt and quickly take advantage of opportunities as they arise. This Plan will help guide that process.

Brief Outline of the Planning process

The planning process was organized by the Dutchess County Agricultural and Farmland Protection Board (AFPB) with coordination by the Dutchess County Department of Planning and Development. Work began in the Fall of 2013 with the formation of a Steering Committee composed of AFPB members, farmers, staff from County Planning, Cornell Cooperative Extension Dutchess County, Dutchess County Soil and Water Conservation District, and Dutchess Land Conservancy. This Steering Committee then hired a team of planning consultants to assist them in developing the plan. A Stakeholders Group consisting of farming and agribusiness professionals, representatives from economic development and tourism agencies, land conservancies, local officials and involved residents was invited to participate in an advisory capacity.

In order to ensure that this Plan meets the needs of Dutchess County farmers, it was prepared with extensive input from farmers, government agencies, not-for-profit organizations, and the general public who attended a public information meeting in December, 2013. Additional input was received through meetings of the Steering Committee and the AFPB, a Farm Operators' Survey, a Public Survey, and a Municipal Officials Survey, as well as from interviews with members of the Stakeholders Group. From these activities the Steering Committee identified agricultural strengths, weaknesses, opportunities, and threats in Dutchess County. Farmer input was critical to the development of the initial vision and subsequent goals and recommendations.



A full outline of the planning process with dates can be found in Appendix 3.

There are many significant and positive features that make Dutchess County a great place to farm. A combination of climate, soils, supportive agencies and organizations, access to a large population, growing market demand for local products, and positive attitudes about farming's future provide a strong foundation for enhancing agriculture in the County. Those positives should not be overlooked and are features that create many opportunities.

However, there are still some challenges to overcome – some are new, while others are long-standing issues that have been identified as barriers in the past. Lack of processing facilities, aging farmers and lack of next generation of farmers, and loss of farmland due to suburban growth are still significant issues. Other issues include a limited available labor force, the high cost of farm operations and of farmland coupled with low monetary returns, and complex regulatory requirements. Equally important is the general lack of awareness among the general public about agriculture and food systems, and the resulting disconnect between agricultural needs and economic development initiatives in the County.

The Agricultural and Farmland Protection Board desired an action-oriented plan to help continue to move agriculture forward. Developing such a plan must build on the positive features in the County and address the remaining hurdles. That process begins with a vision for the future. That vision helps to identify goals to reach for, which in turn, results in a list of strategies required to achieve these goals.

Vision for Agriculture

Dutchess County has established a long-term vision that builds on the positive direction agriculture has taken in the County. The vision for the Plan is to inspire, foster commitment, and motivate high levels of performance for the future. Simply put, the County's vision for its agricultural community is to have a diversity of profitable farms and agricultural businesses that continue to contribute significantly to the economy and quality of life here.

More specifically, the County and its many partners will facilitate future programs so that farms can take advantage of emerging markets in the Hudson Valley and embrace new technologies and practices. Local conditions will encourage farming by preserving core areas of farmland, putting in place farm-friendly policies, and by having a supportive public that is aware of and appreciates local farms. Dutchess County will be known as a location where skilled workers are available, where young farmers are able to make a good living, and a place where new agricultural entrepreneurs want to be. The County, farmers, and farm-oriented organizations will work together in a collaborative way to support all these efforts.

Goals

Five priority initiatives with nineteen specific goals have been established in the Plan to help Dutchess County attain this vision. Goals address agricultural economic development, technical

assistance to farmers, protection of and access to farmland, promotion of farm-friendly regulatory policies, and fostering public awareness, education, and communication.

The nineteen goals lay out a direction for increasing farm profitability and decreasing production costs. They call for diversifying agricultural products and increasing direct-to-consumer sales. Other goals are to provide technical and educational assistance, enhance purchase of development rights programs to preserve more farmland, and help towns update plans and zoning to be supportive of farm activities. Enhancing educational opportunities to recruit the next generation of farmers and increasing education and public awareness about farming are also among the goals. Finally, the goals establish the need to promote communication and collaboration among farmers, the public, and organizations and agencies in the County.

Recommended Initiatives

Five priority initiatives have been developed to help Dutchess County move forward in achieving these goals to foster the county's agricultural economy and further protect farmland. These initiatives are summarized below and explained in further detail in Section 8.

Initiative 1 - Coordination and Collaboration through an Agricultural Navigator & Agricultural Advisory Committee

Agriculture in Dutchess County is diverse and moving in multiple directions. The number of small farms is on the rise, and large farms are prospering. Some farmers are moving steadily into the local market place within the County, while others are going after regional markets throughout the Hudson River Valley or beyond with national and international markets. New types of crops, livestock, and products are being tried, grown, raised, and sold. Over the past years, a wide variety of governmental agencies and non-profit organizations having farmland protection or promotion of agriculture as part of their mission have been established.

While each organization and agency is unique, an ongoing issue has been lack of coordination, communication and collaboration among all these moving parts with risks of duplication of efforts. Agriculture does not always have a unified advocacy for itself. A disconnect between agricultural economic development and other traditional economic development programs has also proven to be a disadvantage to the promotion of the farming industry.

One of the primary recommendations of this Plan is to address the need for coordination and collaboration. This recommendation focuses on the need for an Agricultural Advisory Committee to provide organization and leadership in carrying out the vision of this Plan and the need for an Agricultural Navigator to advance agricultural economic development and to coordinate existing programs. The Agricultural Advisory Committee would be a five person committee that would report to and advise the County Executive on issues and policies regarding agriculture and agri-business. This committee would facilitate implementation of the programs outlined in this plan. There should be a single chairperson or director who reports directly to the County Executive.

The aggregate multiplier for food manufacturing amounts to 3.17 using employment as a unit of measurement. This finding suggests that for every additional new job created in food manufacturing in New York State, an additional 2.2 jobs are supported in industries and sectors structurally linked to the food manufacturing sector. Similarly, the employment multiplier for agricultural and forestry services approaches a relatively robust 2.0, suggesting one additional job for every new job created in the sector.

The conclusion that employment benefits associated with expanded food manufacturing output in New York State are relatively robust is sustained when the frame of reference is the entire macro New York economy. Our results suggest that food manufacturing exerts one of the highest employment multiplier effects of any industry in the State.

The Plan offers different options to create the Navigator position. However it is formed, the need is strong to have a single person that continuously communicates with farmers and the existing agricultural agency/organization infrastructure to put this Plan's recommendations to work. With leadership from an advisory committee, the Agricultural Navigator would take the lead in helping implement many of the other strategies included in this plan.

Initiative 2 - Agricultural Economic Development and Business Retention & Expansion Program

Lack of agricultural economic development has been identified as a key weakness that challenges farms and the broader food system. While there is no lack of specific economic programs that that have been developed to address this issue, lack of staff, institutional capacity, and collaboration prevents positive movement. More emphasis on economic development and more coordination of that work is crucial. While other economic sectors have entities such as the IDA to coordinate and fund projects that benefit those industries, agriculture does not enjoy the same capability. This strategy focuses on agricultural economic development and building capacity to concentrate on economic initiatives.

The agricultural economy is complex and involves many businesses beyond farmers. Agriculture relies heavily on complex machinery, and continuing advances in technology. An extensive network of businesses are needed to support farms ranging from veterinarians to truck drivers. Other support comes from educators, schools, and non-profit groups – all part of the farm economy. This large network of inter-dependent businesses contributes to the agriculture industry's large and positive impact on the local economy. This impact is exemplified by the statewide economic multiplier for agriculture at 1.61.[1] That means that for every dollar related to agriculture, the positive effect is multiplied 1.61 times.

[1] From *Agriculture-Based Economic Development in New York State: Trends and Prospects*. September 2012. T.M. Schmidt and N.L. Bills. Cornell University.

As farm operations move toward a more localized food supply system, they become more tightly wound with other elements of the local economy. In turn, other local businesses become more integrated into the agricultural economy. As farms continue to grow, and expand into the regional and global food supply system, they will continue to bring their profits into the County and the local economy.

This plan calls for an effort on the part of the County, and in particular, the Dutchess County Economic Development Corporation (DCEDC), the Dutchess County Industrial Development Corporation (DCIDA), and the Hudson Valley Agribusiness Development Corporation (HVADC), to recognize this growth and build on it. A robust agricultural economic development program is recommended. A key component of this is to develop an Agriculture Business and Retention Program to regularly communicate with farmers in order to understand, anticipate, and ultimately address their needs, challenges, and opportunities.

Hudson Valley Fresh is a farmer partnership dedicated to preserving the agricultural heritage of the Hudson River Valley. Farmer-owners produce premium dairy products from whole milk to heavy cream, yogurt, and ice cream. All milk is produced in Dutchess, Columbia and Ulster counties and locally processed in Kingston. Hudson Valley Fresh works to ensure that farmers receive a fair price for their product and that the highest quality is maintained. Products are available from the mid-Hudson region to Long Island, New York City, New Jersey and Connecticut.

Initiative 3 - Farmland Preservation

Dutchess County has a unique opportunity to build upon the success of preserving thousands of acres of farmland over the last 15 years. The plan emphasizes focusing on the creation and expansion of core areas of protected farm land, and continued investing in Purchase of Development Rights (PDR) programs, while also broadening farmland preservation efforts to include the lease of development rights and affordability covenants. It also emphasizes the continuation of public/private partnerships between municipal and county governments and land trusts, and support of both ongoing private initiatives and action by local municipalities. The Plan recommends that the County and its partners:

- Continue to purchase the development rights on key farm properties – through multiple funding partners including federal, state, and local government, and local land trusts. Judicious and balanced use of County funding for PDR purposes should also be considered – especially where there is an opportunity to leverage funding from outside sources bringing state, federal and private dollars into the local farm economy.
- Encourage farm conservation organizations and land trusts to continue to expand their working partnerships in order to leverage existing resources and coordinate fundraising and grant opportunities.
- Initiate a Lease of Development Rights Program (LDR) based on the NYS Incentive Payment program, and encourage and assist organizations that are willing to work with farmers on term leases and payments by the State's new funding program.
- Encourage and assist organizations and agencies that are willing to enhance conservation easements with Affordability Covenants (also known as Options to Purchase at Agricultural Value, or OPAV).
- Identify opportunities to create and/or build upon existing core areas of preserved farmland – such as Red Hook's "Bread Basket" – in each of the County's farming communities.
- Expand and support the existing Farmer/Landowner match programs including the Dutchess Land Conservancy/Columbia Land Conservancy, the Winnakee Land Trust and the American Farmland Trust Hudson Valley FarmLink Programs.
- Encourage local municipalities to consider adopting zoning and overlay measures that support diverse local agri-businesses and the preservation of farmland.

Initiative 4 - Farm Friendly Regulation

Agriculture is an enterprise unlike most other businesses. Its reliance on large swaths of land, often located adjacent to very different land uses, may place farm operations in conflict with neighbors and with local land use regulations. Municipal officials tasked with enforcing local laws are often not familiar with the unique needs of farms, nor aware of the unique State regulations and County programs and policies that apply to agricultural operations. This Plan recommends that the various County agencies involved with educational efforts continue to provide agriculture-related training programs, farm-friendly land use regulation models, and support materials for local officials. Model laws and policy documents provided by the County, NYS Department of Agriculture and Markets and others are available to assist towns and villages looking to update their regulations in support of their farms and farm businesses.

The 1998 plan included the recommendation that equitable assessment and taxation policies be instituted. Since then, many Dutchess municipalities have conducted reassessments, and many of those are now reassessing annually so that assessments remain equitable. Equitable assessment for property tax purposes affects the bottom line for all businesses, and land-intensive businesses like farming even more so. It is important that local assessors understand the agriculture-specific aspects of Real Property Tax Law and the pertinent parts of Agriculture and Markets Law, and that farm operators understand assessing practice as it pertains to them. Education on this topic for both groups as well as efforts to increase communication will help reduce assessment errors and friction between landowners and assessors.

Initiative 5 - Marketing, Public Relations and Awareness

One consistent issue that has been identified both in 1998 and now is the lack of understanding the non-farm community has about agriculture. As a result, agriculture faces challenges such as farm-unfriendly local regulations, conflicts and nuisance complaints, and loss of sales opportunities. Helping County residents understand how agriculture contributes to their quality of life and the economy is critical. Farmers themselves need a different kind of education related to being aware of programs, funding sources, market opportunities, and technical skills.

This Plan recommends a comprehensive and multi-audience marketing, public relations and education program. Projects are aimed at helping municipalities and the general public gain new appreciation for the role agriculture plays. This initiative also recommends increased coordination of agencies and organizations in the County and region and use of tools such as web-based resources that inform farmers about opportunities for technical education, funding sources, and market opportunities. To accomplish these projects, the Plan also recommends continued funding of key organizations such as Cornell Cooperative Extension Dutchess County and the Dutchess County Soil and Water Conservation District.

The aging of farmers in the County means that in the next 10 to 15 years farm succession and transition will be a major issue facing agriculture. Unless there is a new generation of farmers, many active farms may go out of business and their land could be converted to non-farm uses. To counter this, the County needs to work with regional partners to promote farming as a viable career choice and to attract ag-entrepreneurs to Dutchess County. This Plan recommends enhancing mentor and apprenticeship programs, developing capital and financial incentives to attract interested young farmers to the County, and promoting agricultural education in County schools.

Regional Perspective

Although this Plan focuses specifically on farming and agri-business in Dutchess County, it also recognizes the importance of the agriculture industry throughout the Hudson Valley and the advantages to be gained by a regional approach to agricultural economic development. A regional perspective will enable Dutchess County to take advantage of opportunities to collaborate on initiatives that could include development of food processing facilities, food distribution systems, coordinated branding and marketing efforts, applications for state and federal funding, and land conservation efforts. Orange and Sullivan Counties are in the process of developing Agricultural and Farmland Protection Plans; both Ulster and Columbia Counties are actively engaged in public and private efforts to support agri-business and protect farmland.

This Plan recommends that the multi-county discussions that have taken place throughout this planning process be continued and expanded as appropriate to take full advantage of the forward momentum that agriculture in Dutchess County and the Mid-Hudson Valley is currently experiencing. Specifically, the Plan recommends supporting the following regional activities:

- Identifying and providing support for a regional "Navigator" position to coordinate activities with regional significance, such as support for brick-and-mortar food processing operations.
- Establishing a regional task force to coordinate fund-raising efforts, developing substantive applications for major grants such as the NYS Consolidated Funding Awards for collaborative agri-business development and support.
- Coordinating development and distribution of county and regional economic data related to the agriculture industry.
- Coordinating the regional activities of partner agencies such as Cornell Cooperative Extension and the Soil and Water Conservation Districts, recognizing and taking better advantage of the services they offer.
- Supporting establishment and expansion of existing multi-county technical and financial support systems for new farmers.
- Developing a regional brand identity.
- Working closely with County Tourism agencies to promote agri-tourism locally and throughout the region.
- Taking advantage of support offered by not-for profit organizations including Glynwood and the Local Economies Project, and local and regional land trusts that have developed plans that take a regional approach to resource protection and funding such as Scenic Hudson's *Foodshed Conservation Plan for the Region*.

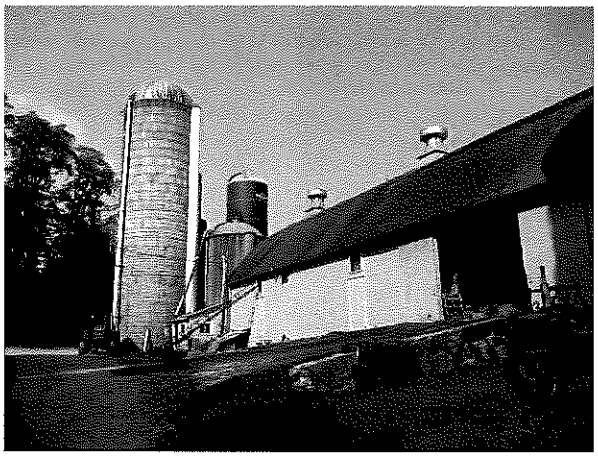
Section 3 - Successes Since the 1998 Agriculture and Farmland Protection Plan

Since 1998, Dutchess County, in partnership with its Agricultural and Farmland Protection Board and numerous farm-related organizations, has established a number of successful programs that implement these original recommendations:

- *Establish Equitable Assessment And Taxation Policies*
  Since 1998, many Dutchess municipalities have conducted reassessments, and many of those are now reassessing annually so that assessments remain equitable. Equitable assessment for property tax purposes affects the bottom line for all businesses, and land-intensive businesses such as farming even more so.

- *Protect Farm-Related Natural Resources*
  In 2000, Dutchess County developed the first Hudson River Valley Greenway (HRVG) Compact Plan that serves as the model for HRVG Compact planning throughout the region. *Greenway Connections, Greenway Compact and Guides for Dutchess County Communities*, has translated into numerous inter-municipal partnerships and projects. The Greenway Guides developed as part of the Compact Plan are a series of concise, visually oriented, two-page information sheets offering best practice examples of Greenway principles in action. The guide titled "Saving Farmland with Development" provides a sample conservation development designed to allow residential development while preserving farmland and reducing conflicts between the two uses. In addition to the individual topic guides, a broader, county-wide Centers and Greenspaces Guide was introduced (See Map 2). The guide and maps depict areas in the County where future development should be encouraged and open spaces protected. The County has also developed municipal Centers and Greenspaces maps for communities including Beacon, Pleasant Valley, Poughkeepsie, Red Hook and Rhinebeck.

- *Protect Quality Farmland*
  In 1999, Dutchess County established the Open Space and Farmland Protection Matching Grant Program, the first of its kind in the Hudson Valley. Expanded in 2000, the Partnership for Manageable Growth Open Space & Farmland Protection Program (PMG) has provided matching grants to help municipalities protect important agricultural and open space resources. Since 1999, Dutchess County has participated in purchasing conservation easements on 2,763 acres of productive farmland on fourteen farm operations, limiting future development to agricultural uses (See Map 1). Each of these farms remains in private ownership, in operation, and on the tax rolls. The PMG Program has enabled the County to

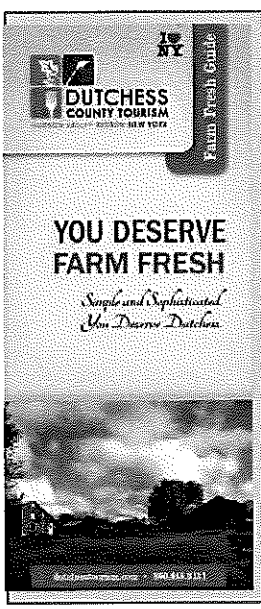


take advantage of federal and state funding opportunities and to establish funding partnerships with local municipalities and land conservancies which have resulted in the purchase of development rights on a total of 5,585 acres. As partners in the County's farmland preservation efforts, the Towns of Beekman, LaGrange, and Red Hook have established local PDR funding programs, and the Towns of North East and Union Vale have contributed to specific PDR projects. Red Hook in particular has an extensive program oriented to farmland protection, which has contributed to establishing a core area of over 3,300 acres of protected farmland.

From 1998 to the present, the total number of acres conserved by land conservation organizations holding donated and purchased conservation easements increased by more than 29,000 acres to a present total of nearly 42,000 acres protected acres. Approximately 29,850 acres of this total consists of parcels that are actively farmed.

- *Improve Marketing Of Locally Produced Goods*
  Dutchess County Tourism has designed the Dutchess County Farm Fresh program to enhance awareness and understanding of the role that farms, agriculture, and food/beverage play in our daily lives—all while developing new markets for local farmers and providing new experiences for visitors. In the past 6 seasons Tourism has brought up almost 6,000 visitors of whom 92% said they had learned something new and 95% said they would come again or refer a friend. Our visitor survey showed that the average ranking of their farm tour experience (on a scale of 1 to 5, with 5 being the highest) was 4.39. In addition, the average spent was $80 per person excluding the train ticket.

  Dutchess County Tourism hosts a Dutchess Farm Fresh Program with Metro North Rail each fall to bring visitors from New York City to experience the local farms and learn more about eating local and staying healthy. Farm Fresh Metro North packages brought 1,200 visitors in 2013, up from 1,100 visitors in 2012. 7 different itineraries were offered with over 20 local farm partners and unique small towns and villages.

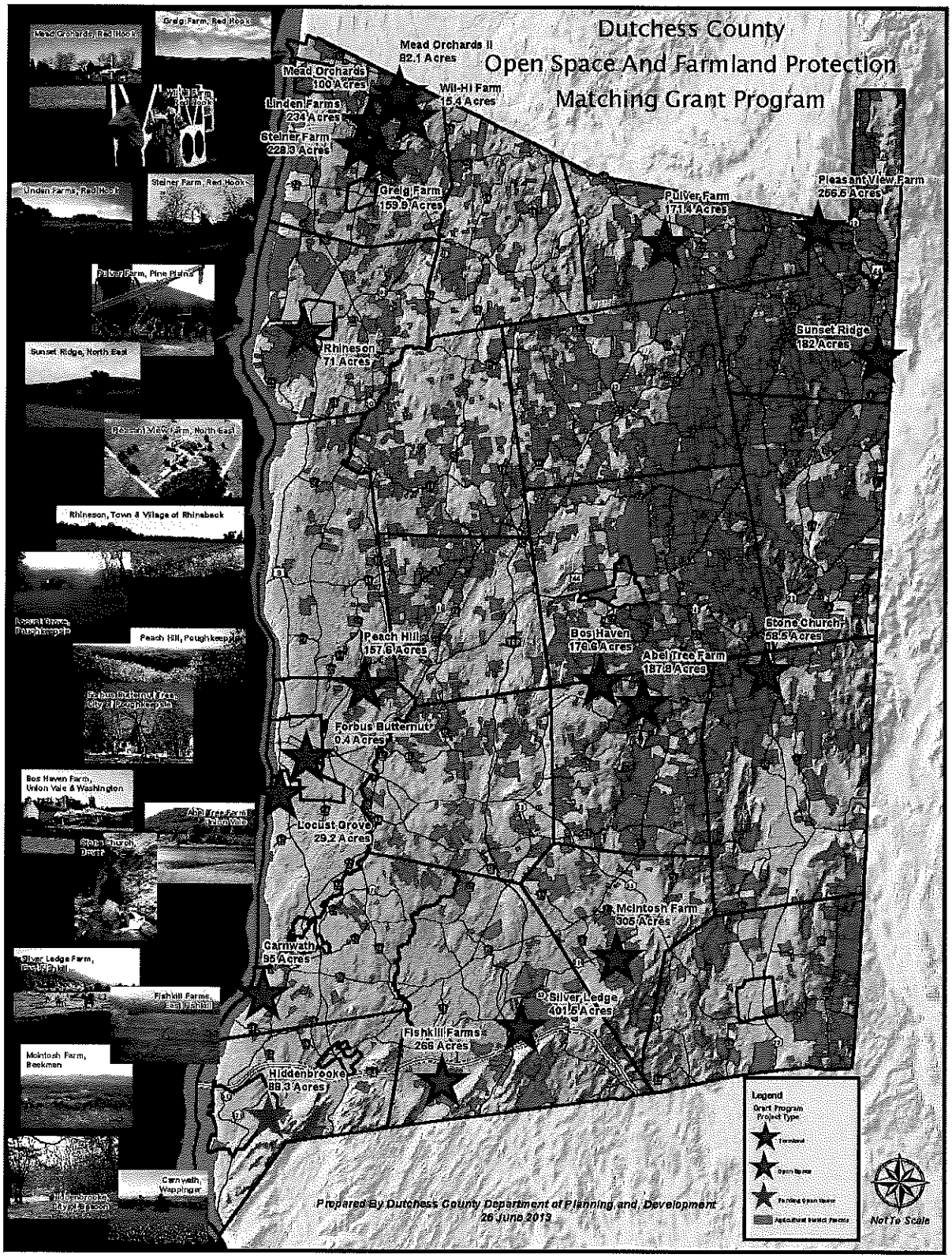


Farm Fresh Guide from the Dutchess Tourism Office is a printed and online guide to agri-tourism in the County. It highlights wineries, wine bars, distilleries, brew pubs, breweries, food themed events, farmers' markets, restaurants that feature local ingredients and products, accommodations, and specialty shops. The guide includes several farm-tour itineraries to help visitors plan their trip through Dutchess County and a map that identifies highlighted farms.

- *Provide Educational Programs For Consumers, Farmers, Realtors, And The Public*
  The 1998 Plan anticipated the increasing diversity of the agriculture industry in Dutchess County. Since that time, there has been dramatic growth in the number of smaller farm operations. Cornell Cooperative Extension Dutchess County educators have been providing information and assistance through the Cornell Small Farms Program, which includes the Northeast Beginning Farmers Project. At the same time, the USDA has instituted the Website for New Farmers to provide information about accessing land and capital, building market opportunities, and accessing the USDA's education and technical-support programs.

  Dutchess County has developed an Agricultural District Database to organize the information gathered during the 2007 Agricultural Districts Review and the annual enrolment periods since 2008. This Database provides a more detailed, accurate picture of the number and diversity of our farm operations as well as the viability of the County's agricultural economy than was previously available. Created and maintained by Cornell Cooperative Extension Dutchess County, the database has enabled CCEDC to develop individual Agricultural Profiles for each municipality—an invaluable tool to encourage local support for farm operators and agricultural businesses and for farmland protection initiatives as well. The upcoming 8-year review of the County's four Agricultural Districts will provide an opportunity to update its valuable inventory of farm-related information.

  Dutchess County government and its partner agencies have developed a robust Geographic Information System (GIS). The Department of Planning and Development regularly coordinates with the staff from Cornell Cooperative Extension Dutchess County, Dutchess County Soil and Water Conservation District, Dutchess Land Conservancy, and other partners, thus maximizing efficiency and the effectiveness of each of those participants work.



Map 1: Open Space and Farmland Protection Matching Grant Program

Section 4 - Agricultural Profile of Dutchess County

Highlights of the Agricultural Economy in Dutchess County

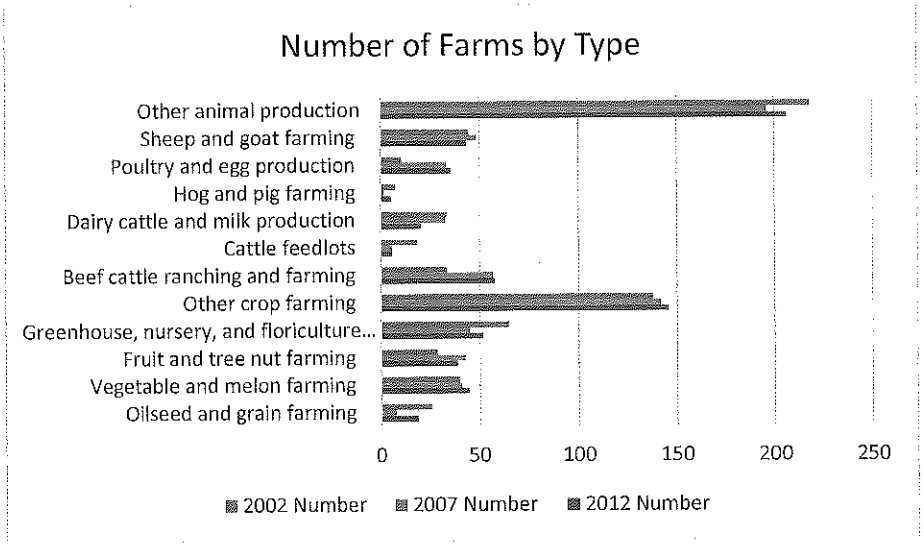
This plan has utilized several sources of economic data including the USDA Census of Agriculture, Dutchess County Cornell Cooperative Extension, Cornell University and the NE Milk Market Administrator. Data collected by Cornell Cooperative Extension Dutchess County as part of the County's 8-year Agricultural District Review and the during the County's annual Agricultural District enrollment process provides locally detailed information. The USDA Census of Agriculture offers a diversity of data that is not collected elsewhere, but is based on voluntary participation by the farmers and does not always account for all farms. Other data from the Northeast Milk Market Administrator is definitive in terms of number of dairy farms, and the milk they have produced. For a comprehensive description of the Dutchess County agricultural economy, see Appendix 2.

Farms

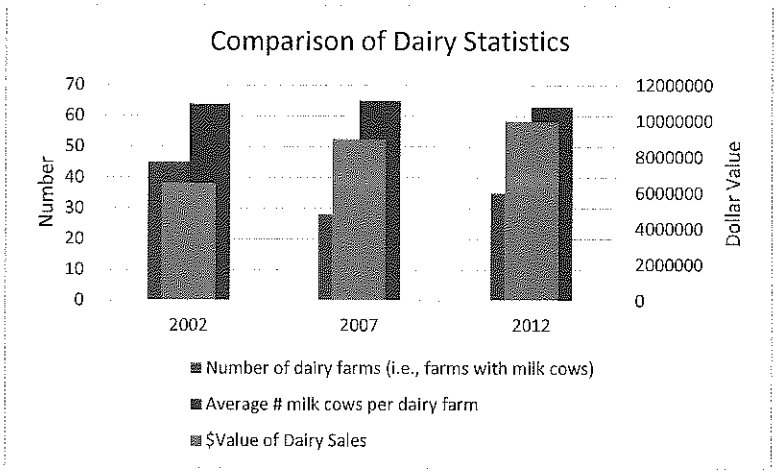
- There are more farms now (678 in 2012) than there have been in the last 40 years. After a steady decline from 635 farms in 1982 to 539 in 1997, the number of farms rose sharply to 667 in 2002 and has been slowly increasing since then.
- The amount of land in farming (112,482 acres in 2012) has been fairly stable for the last 20 years, after a steady decline from 140,368 acres in 1978 to 109,692 acres in 1992.
- Farms today are smaller in size than they have been in the past - 166 acres average size in 2012 versus 239 acres in 1974.
- 50% of farms are small where annual sales of agriculture products are less than $10,000.
- There are 18 farms, (2.7% of all farms), that have sales of $500,000 or more, and they accounted for 42 percent of all agriculture product sales in the County.

Farm Products

- There is a diverse set of crops and agricultural products raised in Dutchess County.



- Some commodities have been stable in terms of the number of farms; others have increased (crop farming, vegetable, and poultry, for example). Dairy in particular has declined in terms of farm numbers. The number of horse farms remain strong where inventory and sales is the largest by county in New York State.
- The number of dairy farms has declined from 126 in 1987 to 35 in 2012. At the same time, dairy farm incomes have increased and milk sales are a significant contribution to the farm economy with over $9 million in milk sales from 22 farms. (Note that County and Northeast Milk Market Administrator data show 22 dairy farms selling milk, while the Census of Agriculture counts 35 farms.)



Farm Operators

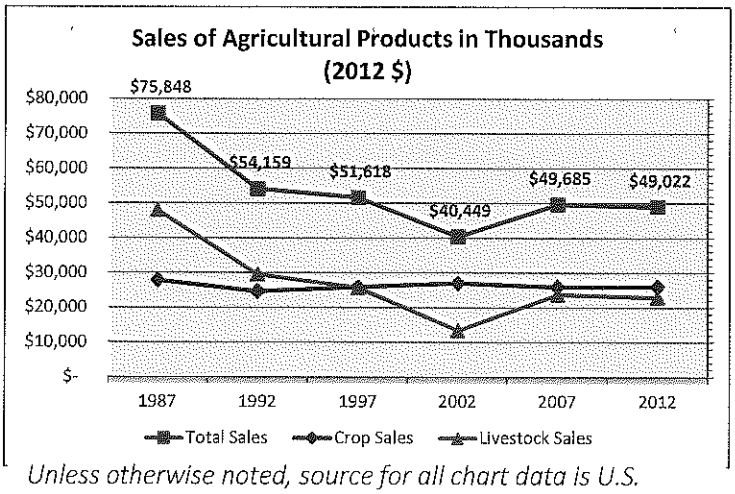
- In 2012 the average age of the 678 farm principal operators was 58.8, up substantially from prior census years, with 63% over 55 years, 24% between 45-54 years, and only 13% under 44 years.
- Employment related to farm production, farm support industries and agricultural manufacturing is about 1,300.
- 5.8% of all farmers aged under 35 years old. This is double the number of young farmers from 2007, when it was 3.2%.
- 36% of all farm operators are women.
- 46% of farms have operators who have off farm primary jobs, higher than other Hudson Valley counties.

Farm Sales and Income[2]

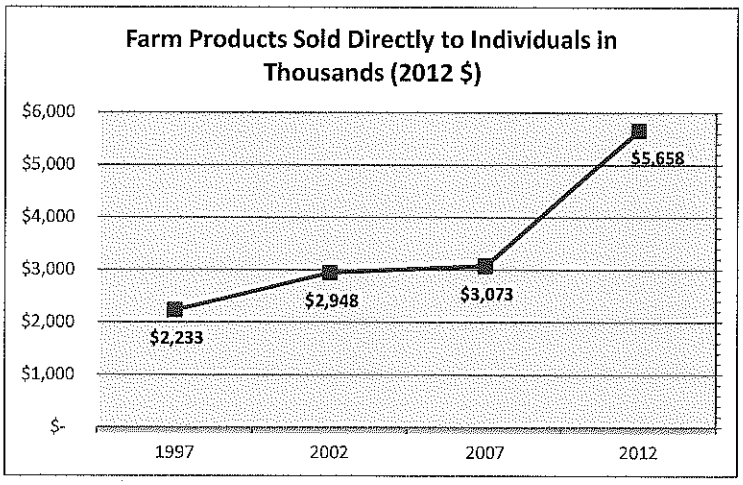
- Average sales per farm have gone from a high of $123,735 per farm in 1987 to a low of $60,643 in 2002, with an increase after that. Now average sales have stabilized since 2007 and were $72,303 in 2012.

[2] All charts showing references to income is in dollars adjusted for 2012.

- Although greatly reduced from 1987 levels, according to the Census of Agriculture sales have remained constant in the past few years and contribute over $49 million dollars to the County economy.
- Cornell University data show a slightly higher level of sales from agricultural products at $51 million. Support businesses related to agriculture and agricultural manufacturing (detailed in Appendix 2) add over $100 million in economic output related to farming in the County. With the agricultural economic multiplier applied, total agricultural economic output is estimated at over $223 million in sales and $119 million in labor.
- Farmers in Dutchess County are selling a greater proportion of their products directly to consumers, via farm stands, farmers markets and other venues.



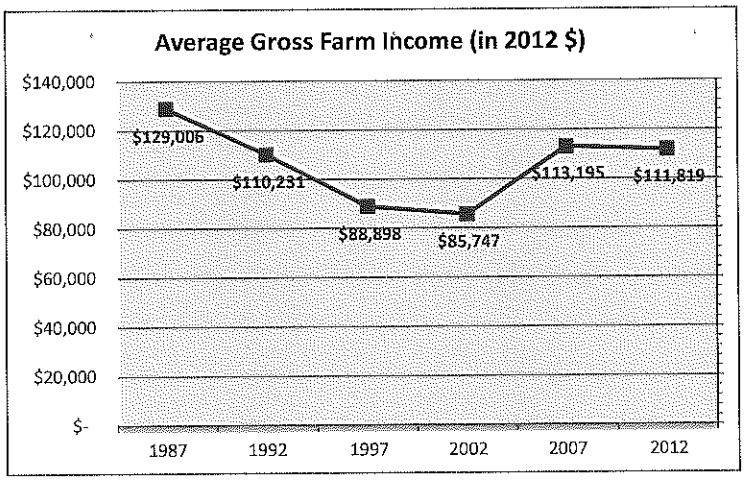
Unless otherwise noted, source for all chart data is U.S. Census of Agriculture 2012 and earlier years. Dollar figures shown are adjusted for 2012 dollars.



Farm Production Expenses

- Dutchess County farms had overall production expenses of $79.3 million.
- Hired and contract labor was the highest production expense, accounting for 28% of the total.
- The second highest production expense was feed, at 13%.
- Property taxes were sixth on the list, accounting for 8.6% of all production expenses.

Farm Income and Value



- In 2012 there were 233 farms with net average gains of $48,317 and 445 farms with net average losses of -$63,847.
- In 2012 gross income from other than product sales accounted for about 27 percent of all income, up from about 17 percent in 2007.
- Agricultural tourism and recreation services had a relatively large increase, with still only a handful of farms participating.

Farm Employment

- The 2012 Census reported 1,414 hired farm workers on 228 (48 %) of all county farms.
- 129 farms reported 326 workers working more than 150 days per year.

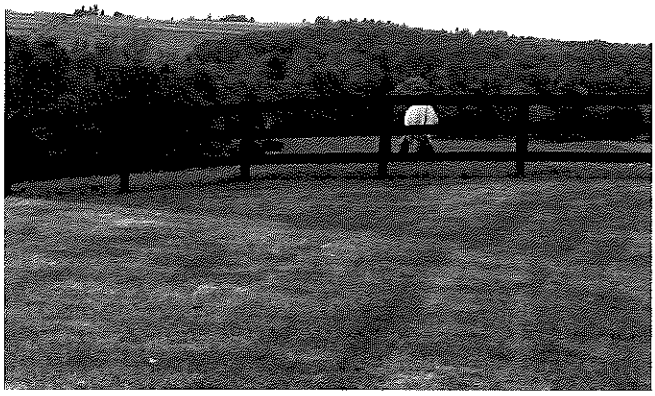
Taste of NY at Todd Hill is the state's first stand-alone Taste NY market. The shop, constructed by the state Department of Transportation and operated by the nonprofit CCE Dutchess County, is at the long-shuttered Todd Hill rest area, south of Route 55 on the Taconic State Parkway. The store showcases products from 15 local farms, on a rotating basis, including state-produced meat, honey and maple syrup. In addition to nonperishables, the store will sell state-made fresh produce, sauces, ice cream, sandwiches, soaps and wool blankets. Revenue from the sales will be used to grow agribusiness and agri-tourism, according to Cornell University Cooperative Extension Dutchess County officials.

Mapping and Descriptions of Farms, Farmland, and Other Resources

Farmed Parcels

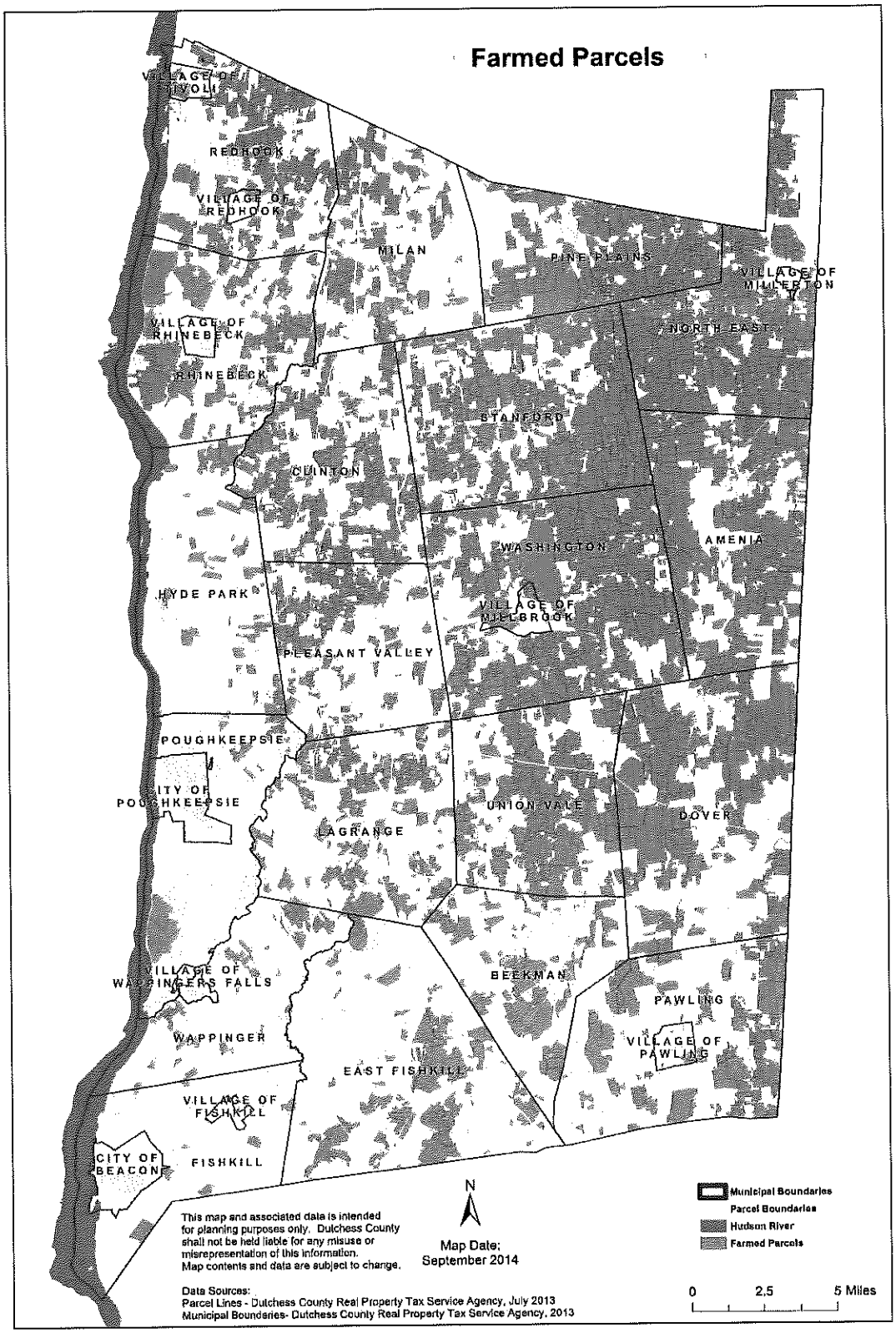
In order to plan for agriculture at any level, we must first know the quantity, quality, and location of farmland within the area. To begin the inventory of farmland for Dutchess County, a comprehensive list of farmed parcels was developed using the County's tax parcel database and other sources. This included all parcels with a code in the 100 range (agriculture) or with a code of 241 (Residential parcels with an associated agricultural use). However, relying solely on the property class codes does not paint a complete picture of agriculture in the county.

The property class codes are used by the local assessors as a way to record what they deem the primary use of an individual parcel to be. Since much of the land used for farming in Dutchess County is not owned by a farmer, and often serves multiple uses, additional methods of identifying farmland must be used. Identifying all parcels receiving an agricultural value assessment and all parcels within one of the county's four Agricultural Districts gives a much more complete picture of farmland.



The Farmed Parcels Map (Map 2) constitutes a comprehensive inventory of farmed parcels in Dutchess County. The highest concentration of farmland in Dutchess County occurs in the Northeastern towns, including Amenia, Dover, North East, Pine Plains, Stanford, Union Vale, and Washington, which all have farmed parcels that account for more than 50% of their land area. (Note: this does not mean 50% of the town is in active agriculture, as the entire area of each farm parcel is usually not in active agricultural use.)

Other municipalities that have significant areas of agricultural use are the Towns of Beekman, Clinton, East Fishkill, La Grange, Milan, Pawling, Pleasant Valley, Rhinebeck, and Red Hook, and the Villages of Millbrook and Tivoli, all of which have farmed parcels that account for more than 18% of their land area (See Table 1). The remaining municipalities - the Towns of Fishkill, Hyde Park, Poughkeepsie, Wappinger, the Cities of Beacon and Poughkeepsie, and the Villages of Fishkill, Millerton, Red Hook, Rhinebeck, and Wappingers Falls - all have farmed parcels that make up less than 20% of their land area and all are found along the Hudson River, in the Southwestern area of the county.



Map 2 - Farmed Parcels

Table 1 - Distribution of Farmed Parcels

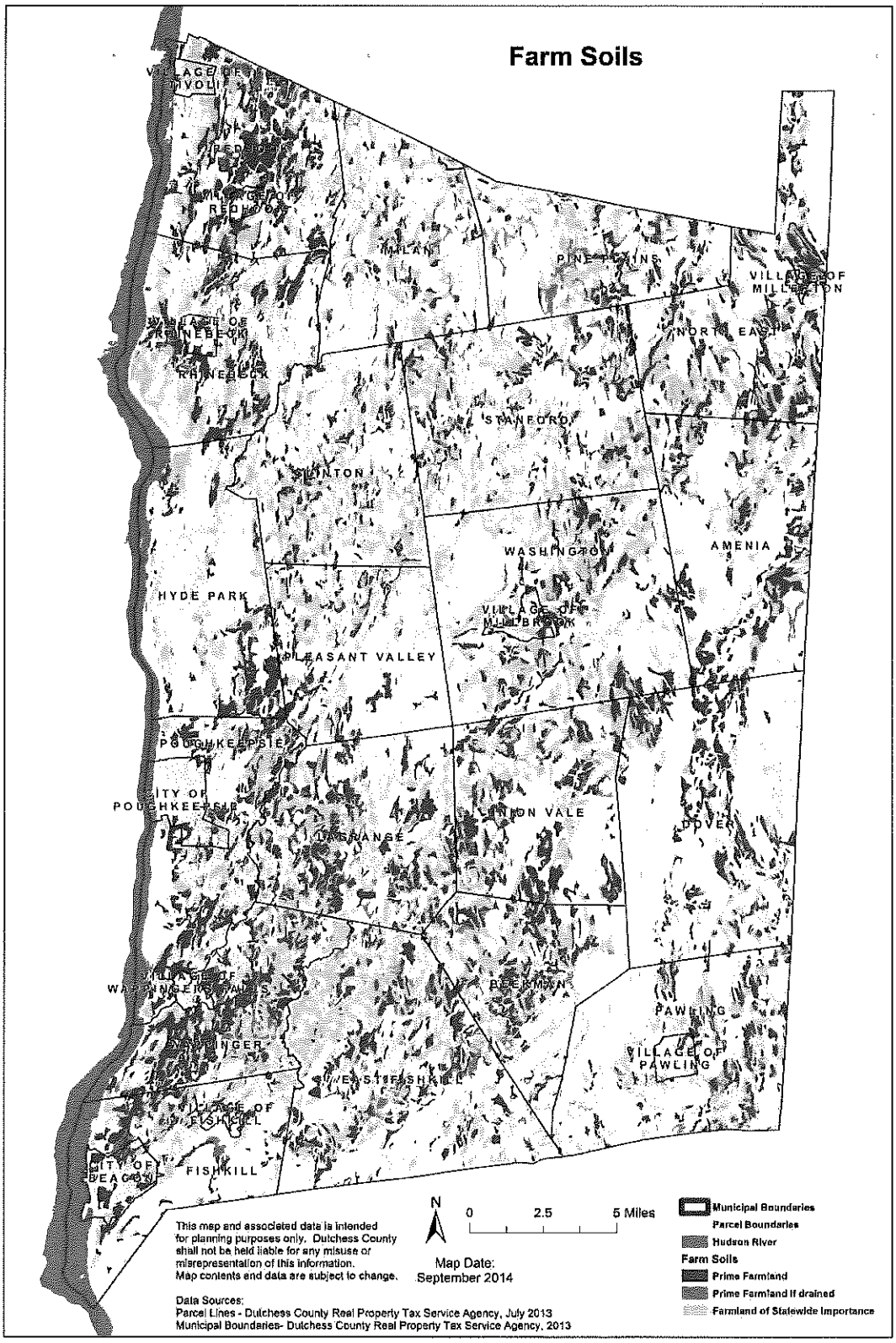
Town/Village	Number of Farm Parcels	Total Farm Acres	Percent of Town in Farmland	Acreage in NYS Agricultural District	Acres Receiving Agricultural Value Assessments
Amenia	285	18,494	66%	17,335	10,466
Beekman	107	5,472	28%	4,582	2,804
Clinton	326	11,322	46%	8,356	4,986
Dover	220	19,263	53%	12,491	8,642
East Fishkill	168	7,275	20%	6,740	4,148
Fishkill	19	680	3%	423	48
Hyde Park	62	3,072	12%	2,891	1,527
LaGrange	254	7,839	30%	6,769	4,443
Milan	152	7,187	31%	5,529	3,071
North East	372	19,569	70%	18,947	14,881
Pawling	162	9,572	33%	8,361	5,918
Pine Plains	229	13,096	66%	12,300	10,249
Pleasant Valley	224	6,477	31%	5,908	3,658
Poughkeepsie	39	1,683	8%	589	223
Red Hook	263	9,081	36%	8,193	7,112
Rhinebeck	187	9,067	36%	7,802	5,369
Stanford	460	21,471	67%	20,385	11,844
Union Vale	206	12,883	54%	10,149	4,579
Wappinger	65	1,800	10%	1,676	1,174
Washington	473	25,529	68%	23,429	17,352
V. Millbrook	11	376	30%	374	359
V. Red Hook	8	125	18%	125	112
V. Rhinebeck	3	4	0.5%	2	4
V. Tivoli	11	321	32%	321	56
Total	4,306	211,659	40%	183,675	123,026

Farm Soils

Successful agriculture depends on quality soils. High quality soils require less fertilizer and nutrients for growing crops. Farms with more productive soils typically have lower costs and higher production rates. Prime Farmland Soils and Soils of Statewide Importance are defined by the USDA and New York State. These are considered the most productive soils for farming. Dutchess County has a wide range of soil qualities that are distributed throughout the County (Map 3).

About 79,000 acres (15%) of soils in Dutchess County are considered prime farmland, 16,688 acres (3%) are considered prime farmland if drained, and 144,188 acres (27%) is considered farmland of statewide importance. Overall, these soil types compose 45% of Dutchess County's land area. However, much of this high quality farmland has been converted to non-farming uses in recent years, particularly in the Southwestern portions of the county. Large blocks of farmland still remain in many of the towns north and east of the City of Poughkeepsie.

Hops field at Dutchess Hops



Map 3 - Farm Soils

Agricultural Districts

The New York State Agricultural District Program exists to protect current and future farmland from nonagricultural development. This is a voluntary program to help reduce competition for limited land resources and help prevent local laws which would inhibit farming and raise farm taxes. Predominantly viable agricultural land is eligible to be included in the Agricultural District Program.

Following the comprehensive 8-year review of the County's Agricultural Districts in 2008, the NYS Department of Agriculture and Markets certified the inclusion of 178,810 acres into the County's Agricultural Districts.

In order to give agricultural landowners an opportunity to add land to an existing agricultural district between 8-year reviews, the Dutchess County Legislature has established an annual 30-day period, from April 15th through May 14th, during which a landowner may request inclusion of land into a certified Agricultural District. As required by NYS Agriculture and Markets Law, the Dutchess County Agricultural and Farmland Protection Board will conduct a comprehensive review of the County's four Agricultural Districts in 2015 on behalf of the Dutchess County Legislature. This review will provide an opportunity to update our inventory of farm resources and to provide our municipalities with valuable information about the agriculture industry in their communities.

There are four NYS Agricultural Districts in Dutchess County (see Map 4) which include 3,871 parcels.

Agricultural District 20 is located in the northwestern towns of Clinton, Hyde Park, Milan, Pleasant Valley, Red Hook, Rhinebeck, and the villages of Red Hook and Tivoli.

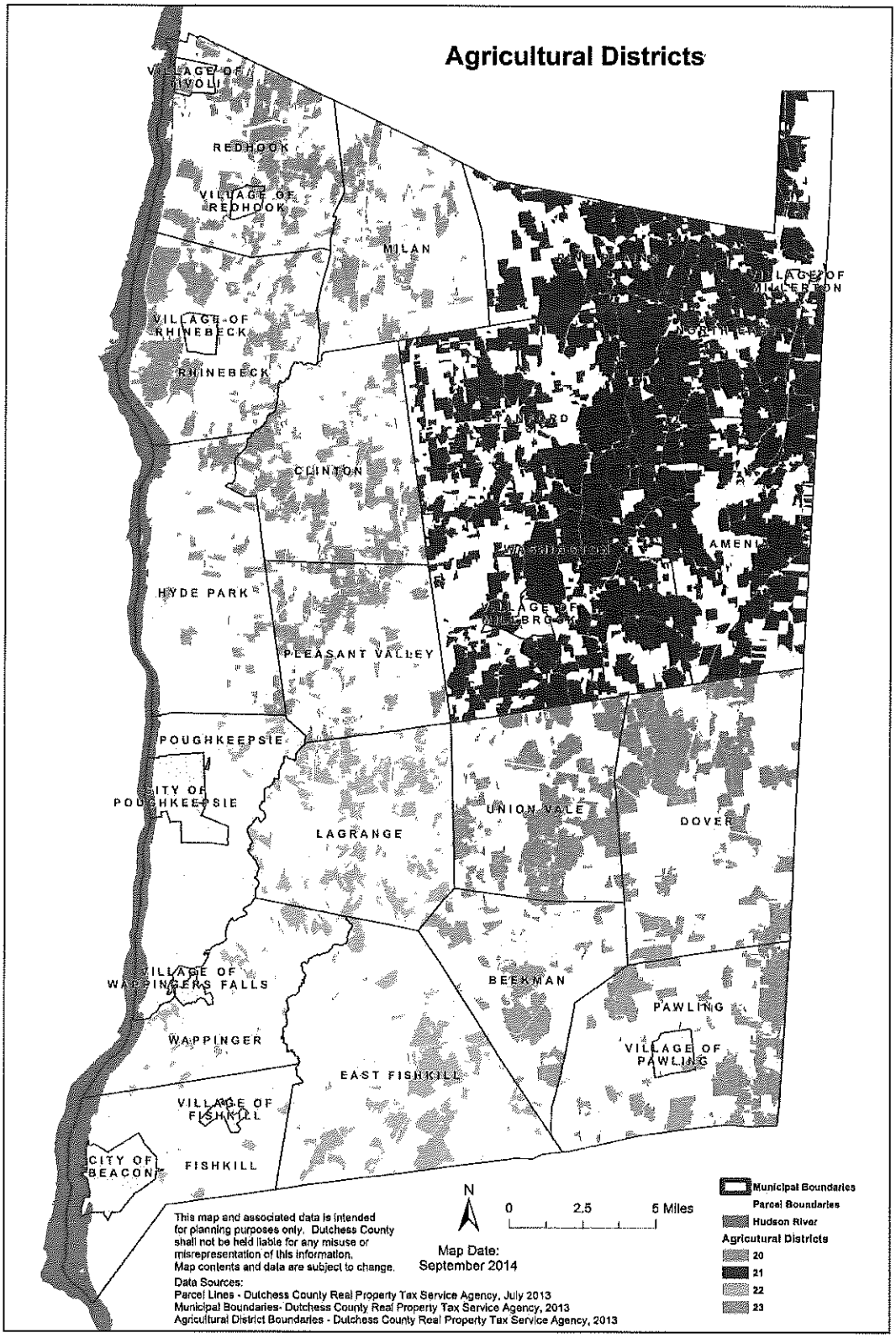
Agricultural District 21 is located in the northeastern towns of Amenia, North East, Pine Plains, Stanford, Washington, and the Villages of Millbrook and Millerton.

Agricultural District 22 is located in the southwestern towns of Fishkill, East Fishkill, LaGrange, Poughkeepsie, and Wappinger.

Agricultural District 23 is located in the Southeastern towns of Beekman, Dover, Pawling, Union Vale, and the Village of Pawling.

DUTCHESS HOPS

Dutchess Hops is the first commercial Hop Farm in the Hudson Valley. They have 4000 hills on 4 Acres and by 2015 we will be looking to expand to 15 acres. They will be practicing all organic methods on the farm. Eastern View Nursery in Lagrangeville is Home to Dutchess Hops.



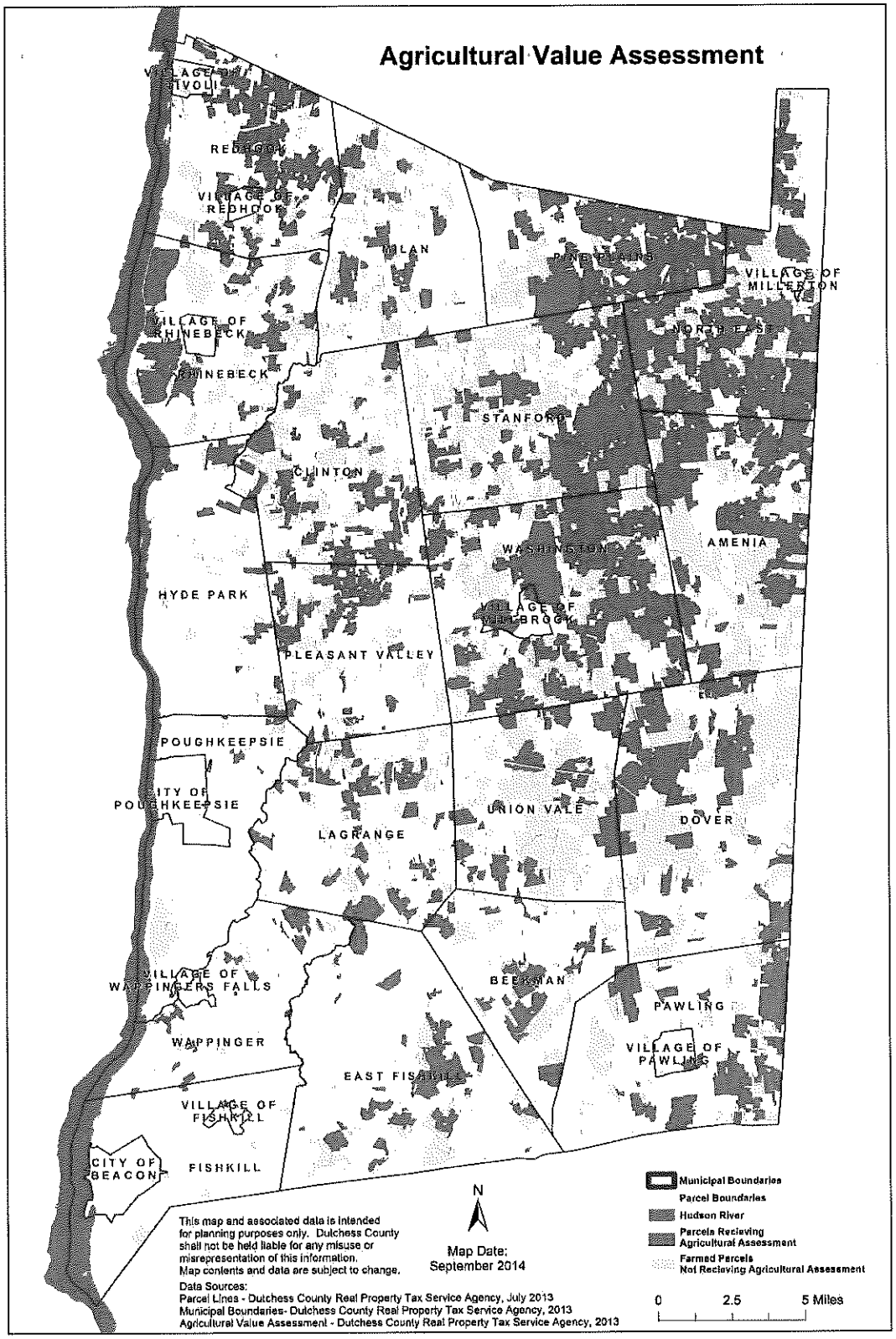
Map 4 - Agricultural Districts

Parcels Receiving Agricultural Value Assessments

Farmers and farmland owners can take advantage of reduced tax assessments through the New York Agricultural Assessment Program. Generally, farmland that receives a reduced assessment must be actively farmed and show a commitment on the part of the farmer and/or landowner to continue farming.

There are 1,940 parcels and 123,026 acres of land in Dutchess County that receive agricultural assessments. Map 5 shows the parcels of land that are included in the agricultural assessment program. It illustrates the most active concentrations of producing farms in the County. It is common to confuse enrollment in an Agricultural District and participation in the Agricultural Value Assessment Program. The Agricultural and Farmland Protection Board has developed *Differences at a Glance*, a summary that explains both programs, and is available in Appendix 9.

Not all farmland parcels receive agricultural value assessments. Map 5 also illustrates those parcels identified as farmland that do not receive agricultural value assessments. Not all farmland is eligible to participate in the Agricultural Value Assessment Program. However, it appears there may be some eligible farmlands that are not taking advantage of the lower tax rates offered through the State program.



Map 5 - Agricultural Value Assessment

Protected Farmland and Open Space

Dutchess County has a long and strong legacy of protecting valuable farmland and other open space properties. There are many land trusts and other not-for-profit organizations operating in Dutchess County that either own land or hold conservation easements on properties that serve a farmland protection or other conservation purpose. The area of protected land in Dutchess County now totals 74,262 acres, including 30,548 acres of preserved farmland, of which 5,585 acres have been acquired through a purchase of development rights (PDR) program.

PDR in Dutchess County

Since the adoption of the 1998 *Agricultural and Farmland Protection Plan*, Purchase of Development Rights has been one of the most successful strategies for farmland preservation in Dutchess County. PDR results in the permanent protection of farmland, while also providing a critical source of capital for farm operations which may be used to purchase additional land, upgrade equipment and infrastructure, reduce debt, and assist with family farm generational transfers allowing older family members the ability to retire.

PDR projects often involve funding from two or more funding sources, requiring participating organizations to leverage funds from multiple sources including private, municipal, county, state and federal programs. In 1998 there were no formal farmland protection programs in Dutchess County, nor were there any funding sources to purchase development rights on farms. Adoption of the Plan qualified Dutchess County to apply for PDR funding from the New York State Department of Agriculture and Markets' Farmland Protection Implementation Grant Program (FPIG). In 2000, Dutchess County created its Partnership for Manageable Growth (PMG) Open Space and Farmland Protection Program, which provided matching funds for PDR projects. Subsequently, the Towns of Red Hook, LaGrange, and Beekman passed bond referenda to provide municipal funding for PDR projects, and the Towns of North East and Union Vale agreed to provide matching funds to protect specific farms in their communities. Red Hook subsequently passed a second referendum creating a Community Preservation Act fund based on real estate transfer fee revenues to provide an additional funding source.

Adoption of the County's Agricultural and Farmland Protection Plan also corresponded to a great surge in private land conservation in the late 1990s which has continued to the present. At that time land conservation organizations that worked within Dutchess County such as Dutchess Land Conservancy, Oblong Land Conservancy, Scenic Hudson Land Trust, Winnakee Land Trust, and American Farmland Trust held approximately 13,000 acres under privately donated conservation easements, about 6,500 acres of which was farmed. Soon after the County's plan was adopted, the Scenic Hudson Land Trust committed to funding its own PDR program, and in 1999 established a pilot project where it successfully purchased the development rights on 1,000 acres of critical farmland in Red Hook.

From 1998 to the present, public and private programs have resulted in the permanent preservation of 5,585 acres and 40 working farms at an investment of approximately $30.5 million ($9.5 million invested by local municipalities and Dutchess County, leveraging $21 Million from Federal, State, and private sources.) This represents a major capital investment in the farm economy during this time, and a significant statement about how vital farming and farmland preservation are to Dutchess County residents.

During this same period, the total number of acres conserved by organizations holding conservation easements (donated as well as purchased) increased by over 29,000 acres to a present total of over 41,968 protected acres. Approximately 29,869 acres of this total consist of parcels that are actively farmed. While working farmers are rarely in a position to donate conservation easements, they benefit greatly from the both the opportunity to sell their development rights, as well as to lease highly productive, protected farmland for pasture, hay, corn or other crops.

After 2008, both New York State and Dutchess County temporarily suspended their funding programs. During this time, however, working with Dutchess Land Conservancy (DLC) and the Town of Red Hook as partners, Scenic Hudson initiated a new, cooperative model for completing PDR projects. Since early 2012, this partnership has resulted in the acquisition of 12 conservation easements through the USDA's Farm and Ranchland Protection Program (FRPP). DLC also worked with the Towns of LaGrange and Beekman, using approved farmland protection bond funding to preserve three key farms, and successfully closed five projects with pre-2008 approved State and County funds.

Subsequently, in 2013, following on the publication of its *Foodshed Conservation Plan for New York City and the Hudson Valley*, Scenic Hudson expanded the area of its PDR program beyond Red Hook to include a much larger area of Dutchess County. Because of New York City's heavy reliance on food grown locally in our region, an opportunity exists for new matching funding from sources

interested in protecting the metro area foodshed (See Appendix 10). In 2014, NYS resumed and expanded its FPIG program, opening the list of qualified applicants for the first time to land trusts.

The Red Hook Model

Many of the most innovative and successful farm conservation initiatives in the County have occurred in the Town of Red Hook. Early on, Red Hook's goal was to protect its working farms and agricultural heritage. In 2003, building on Scenic Hudson's original PDR initiative, residents of the Town and Village of Red Hook and the Village of Tivoli voted to approve a bond to fund farmland preservation projects, and in 2007 voted to create a permanent Community Preservation Act fund based on a real estate transfer fee. Red Hook also adopted an Agricultural Business District, as well as an Intermunicipal Centers and Greenspaces Plan that aims to concentrate future growth within the existing village centers. As a result, Red Hook has now permanently preserved 3,300 acres through PDR, over half (53 percent) of the acreage of farms receiving Agricultural Value Assessment in the entire Town.

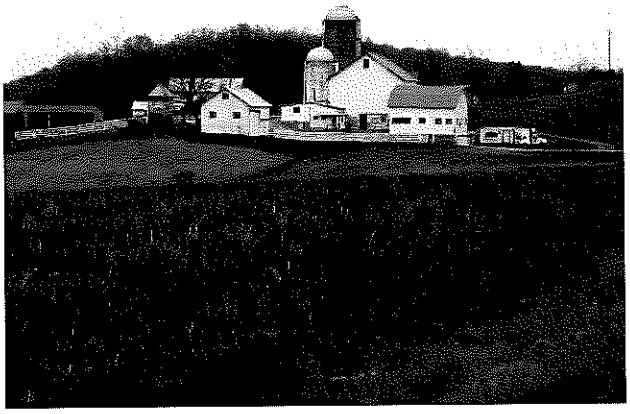
Leasing Development Rights (LDR)

Despite the relative success of PDR programs, there is general understanding that PDR alone is not sufficient to preserve farmland in Dutchess County. For this reason, the new State FPIG Program also established a Lease of Development Rights Program (LDR) in addition to its PDR Program. Beginning in 2014, funding from the NYS Department of Agriculture and Markets now includes $2 Million budgeted for LDR as part of its Incentive Payment Projects program. The new NYS program pays 75 percent of the LDR cost, which is based on paying the landowner a percentage of the assessed value of their land (exclusively of structures). An LDR program does not require the same level of investment as a purchase development rights program; and the protection is temporary for a certain specified time period, rather than permanent. It benefits farm landowners by allowing them to lease their development rights at market price and at the same time protect the land for future farming into the foreseeable future. While the process of setting up such programs is complicated and will require research and training, there is a potential for local conservation organizations or other agencies to establish such programs locally.

Option to Purchase at Agricultural Value (OPAV)

There is also considerable interest in providing opportunities for young farmers to purchase farmland at affordable prices. Conservation easements are an extremely good tool to preserve farmland, but do not necessarily ensure that farmland remains in the hands of working farmers. For this reason, a number of organizations around the county have been researching a tool that enhances conservation easements with Affordability Covenants. These Covenants, also known in neighboring states as Options to Purchase at Agricultural Value (OPAV), establish a mechanism that enables the land trust holding an agricultural easement to require that, when the sale of an easement property is pending, the sale be to a farm operator, at a price based on farm values. Vermont Land Trust in particular has successfully employed these tools for over a decade to keep tens of thousands of acres in active farming. Additional funding sources need to be researched so that Affordability Covenants can be more regularly utilized as an effective tool.

As the economy continues to recover, development pressure will return; conversion pressure on land and real estate values will rise, and the cost to protect critical farmland will likely increase.



Protected Lands

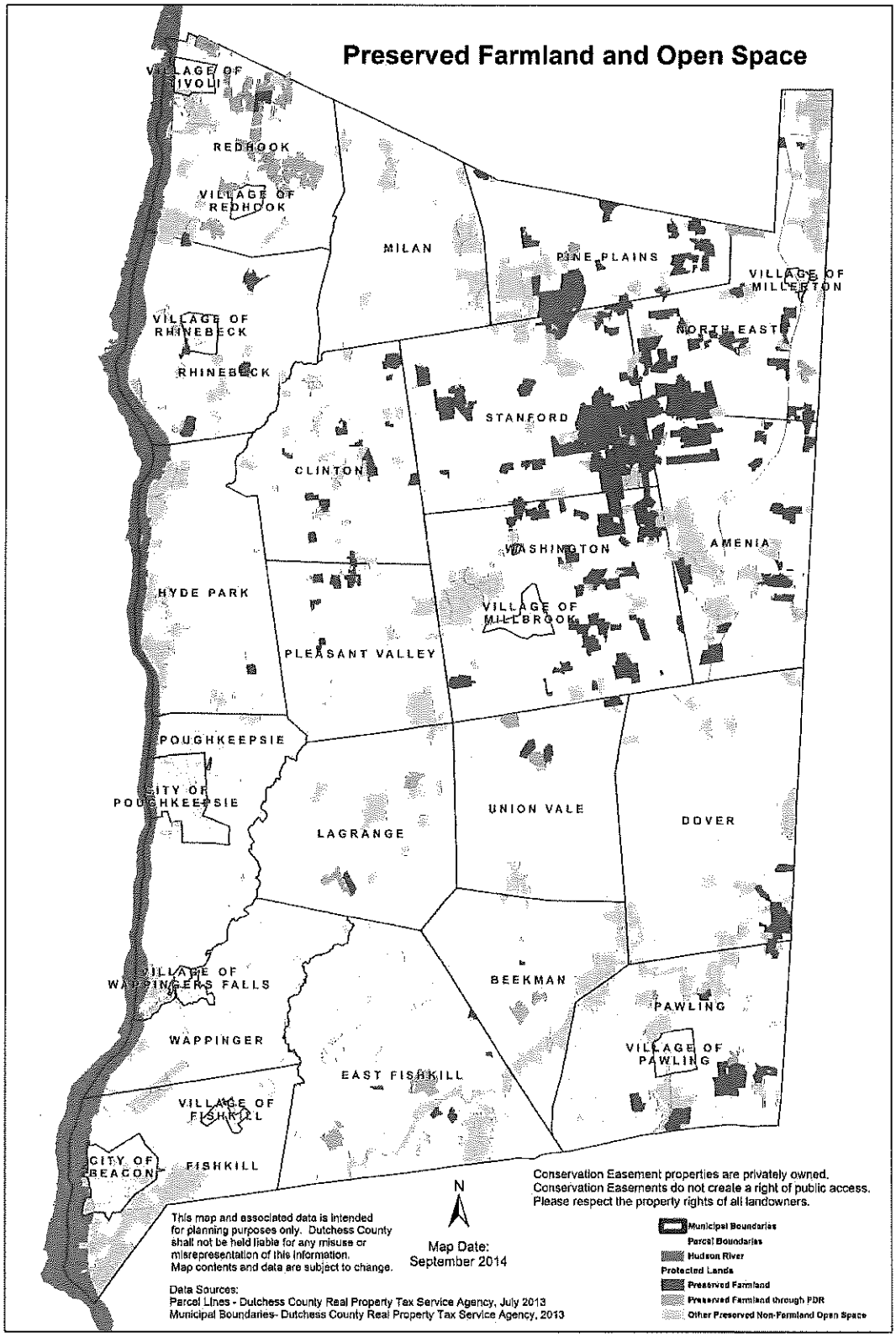
There are 74,262 acres of land preserved through PDR, conservation easement donation, and land ownership (See Table 2). 41,968 acres are preserved through easements managed by various organizations. Over 70% of easement lands are preserved farmlands (See Table 3). The map (Map 6) on the following page shows the lands in Dutchess county that are owned by a conservation organization, have a conservation easement held by a conservation organization, or are owned by a government agency and serve an open space or recreational purpose. While not all of these protected lands are used directly for farming, they can and do benefit agriculture. Preserved open spaces provide a buffer between agricultural uses and neighboring residential uses. Preserved lands can help guide growth into more appropriate areas, saving some of the natural resources that farming relies on. They protect both ground and surface water quality, and can help provide a sustainable source of forestry products.

Table 2 - Land Preserved Through Ownership, PDR, and Other Methods

Land Type	Total acres
Preserved Farmland, PDR	5,585
Preserved Farmland, Non-PDR	24,963
Other Preserved Non-Farmland	43,714
Totals	74,262

Table 3 - Farmland and Open Spaces Preserved Through Conservation Easements

Organization	Acres of Preserved Farmland	Total Acres Preserved
American Farmland Trust	1,238	1,238
Dutchess Land Conservancy	26,162	34,292
Oblong Land Conservancy	-	1,097
Scenic Hudson Land Trust	2,251	3,401
Winnakee Land Trust	805	1,940
Totals	29,868	41,968



Map 6 - Preserved Farmland and Open Space

Ronnybrook Farm is a grass-fed local farm selling quality dairy products in the New York and Tri-State area. Their products can be found at natural stores and gourmet shops, and participate in the New York City Greenmarket. They offer kosher creamline milk, drinkable yogurt, yogurt, ice cream, butter, and crème fraiche.

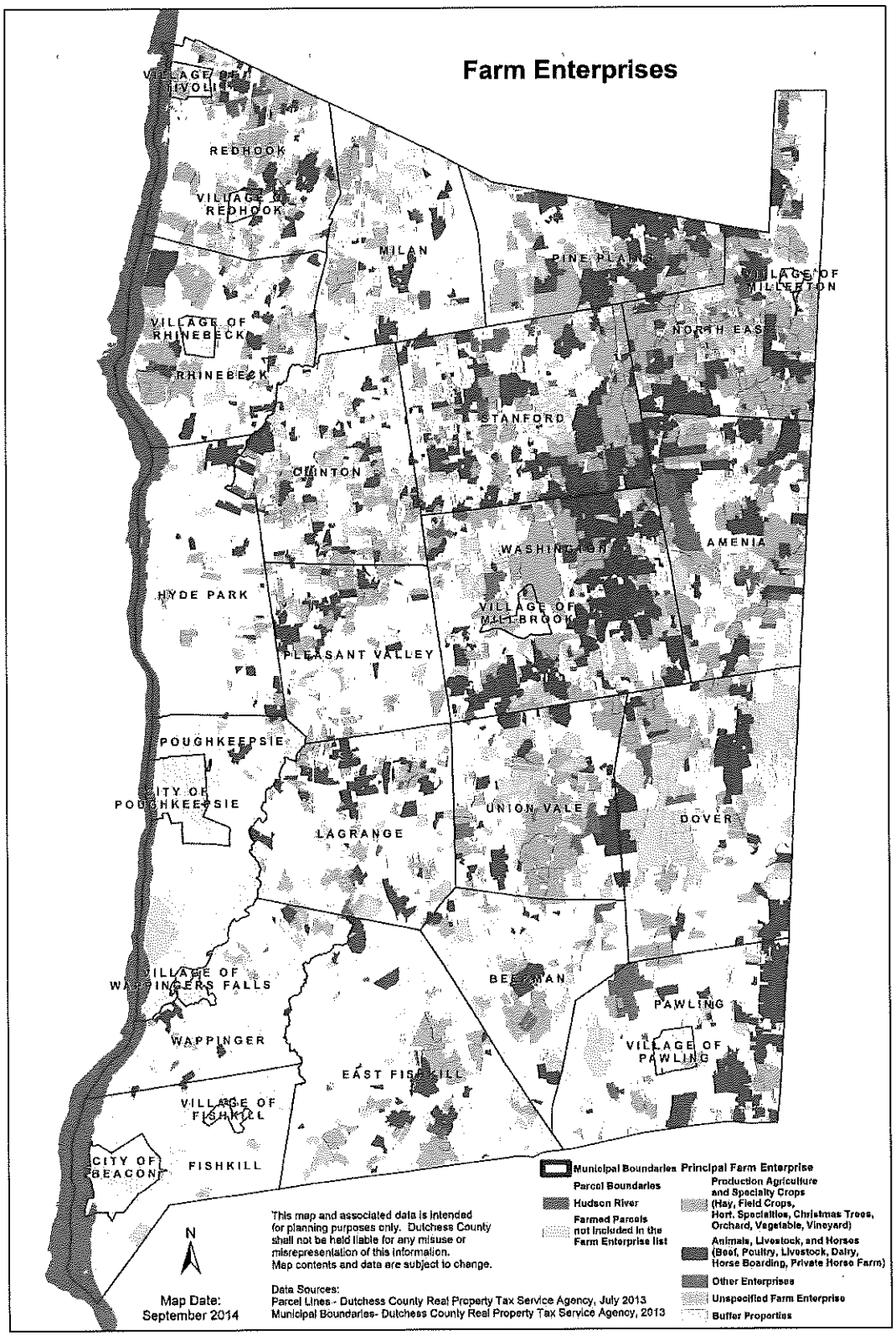
Farm Enterprises

Cornell Cooperative Extension, has developed a mapable inventory of "Farm Units" as an aid to the Dutchess County AFPB and SWCD. These are groups of parcels of land that are owned or rented for agricultural purposes by a single farm operation.

This database contains a wealth of information including the name of the farm operation using the land, the land owner, the principle enterprise of the farm. It was developed in 2009, and is updated on a regular basis. It is used in this plan to identify the Core Agricultural Areas described in the Farmland Priorities exercise, and was one of the most heavily weighted criteria used to map the County's priority farmland protection areas.

The farm unit database will be updated during the eight-year review of the Dutchess County Agricultural Districts Program, which will be conducted in 2015. As part of the enrollment process, landowners will be asked to provide current production and economic information about their farm operations. The farm-specific information compiled in the County database is more accurate and timely than the more general information found in the USDA Census of Agriculture. However, since this is a relatively new program, the data has not yet been acquired over a long enough period to be useful for historic comparisons. For this reason, most of the charts and graphs created for this Plan rely on information gleaned from the 2012 USDA Census of Agriculture.

This farm unit database also provides the basis for the County-wide Farm Enterprises Map (Map 7) and the Amenia Community Profile of Agriculture and Farms that follow. The Amenia Profile is an example of similar summaries that will be available to all Dutchess municipalities, providing detailed information about the farm enterprises in each community. The profiles can be regularly updated as agricultural district enrollment and farm unit information change over time.



Map 7 - Farm Enterprises

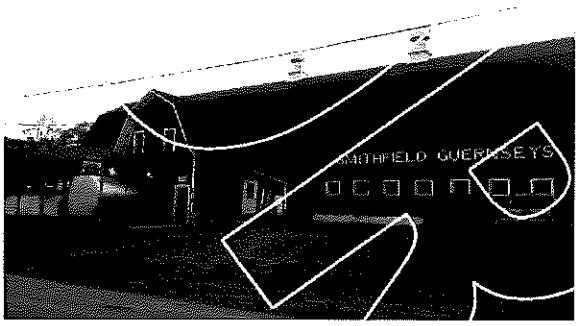
Community Profile: Agriculture and Farms - 2014

Amenia, New York

Cornell University
Cooperative Extension
Dutchess County

Dutchess County Agriculture

Dutchess County agriculture comprises over 170,000 of the county's 512,000 total acres (30%). Our farms produce a total of $44.8 million in goods and are a large part of the county's $438 million. Agriculture is also the county's third largest employer; its diversity and impact on the local economy is substantial.



Coon Brothers Farm. Photo credit Sean Carroll

Agriculture in Amenia

The Town of Amenia, in Agricultural District 21 (Figure 1) saw an increase in population between 2000 and 2010. The extension of the Metro-North Harlem Valley Line to Wassaic may be one of several factors influencing this growth. The Town's recent focus on developing the hamlet center and its participation in intermunicipal studies of local aquifers and the entire Route 22 corridor, have highlighted the importance of protecting the Town's outlying farmland and scenic viewsheds. The Town's Master Plan notes that there has been a shift from traditional farm uses (dairy, hay, and field crops) toward an increase in the number of horse farms and vineyards, contributing to Dutchess County's number 1 status in NYS for the value of our equine population.

The Town of Amenia adopted a Comprehensive Plan Update and revised Zoning Ordinance in 2007. The Plan notes the dramatic increase since 1991 in lands protected by conservation easements from 522 acres to 3,553 acres. Properties under easement include many of the equine operations that have proliferated over the last fifteen years. The viability of Amenia's large-scale farm operations, including its dairy farms, is essential to long-term protection of the Town's working landscape.

A Closer Look

Communities in Dutchess County contain a diverse range of farm enterprises, from dairy and livestock to specialty crops, horses, and vineyards. Many of the farms produce a variety of goods as well. For example, some dairy farms also produce hay or grains. However, if the majority of the farm's income is generated from dairy, dairy is considered the enterprise. Farm enterprise types were developed from documentation provided by the New York State Department of Agriculture and Markets; they were then aggregated into larger categories for simplification.

Table 1. Farms and Acreage in Amenia

Number of Farms	154
Average Size of Farm	166 acres
Land in Farms	18,115 acres
Total Land in Amenia	27,904 acres
Percentage of Town in Farms	65%

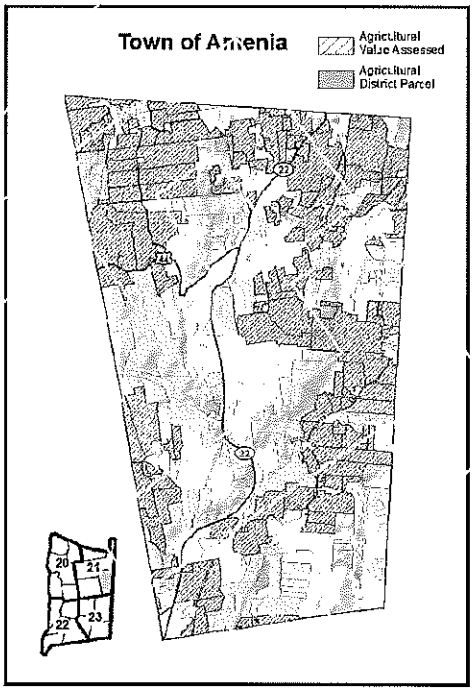


Figure 1. Map of Town of Amenia in Agricultural District 21

Figure 2 illustrates the relative distribution of farm enterprises in the town of Amenia. The largest segment (by acreage) is *Production Agriculture*, with 42 farm operations on 7,194 acres of farm property. Farm property includes all the property tax parcels owned and/or operated on by a farm operation. Actual cropped or pasture area may be less than the area of the entire farm property. *Dairy* is a particularly agricultural segment in Amenia, with 9 farms on 3,275 acres.

Other farm enterprises (see legend) was the next highest category by area, with 5 farm operations on 2,110 acres. *Buffer* properties followed with 39 on 1,950 acres. Buffer properties are often smaller sized, single parcels as opposed to the groups of parcels on which farms may spread. Buffer properties border larger farm property parcels, and therefore can be present in fairly high numbers, as in Amenia.

Beef and Livestock and *Specialty Crops* followed at 1,950 acres (39 farms) and 351 acres (9 farms), respectively.

Most farms in Dutchess County are small farms, grossing less than $10,000 in annual sales. These farms typically make fewer capital investments. Amenia is not an exception. There are twice as many farms with annual gross sales or capital investments under $10,000 than those with more (Figure 3).

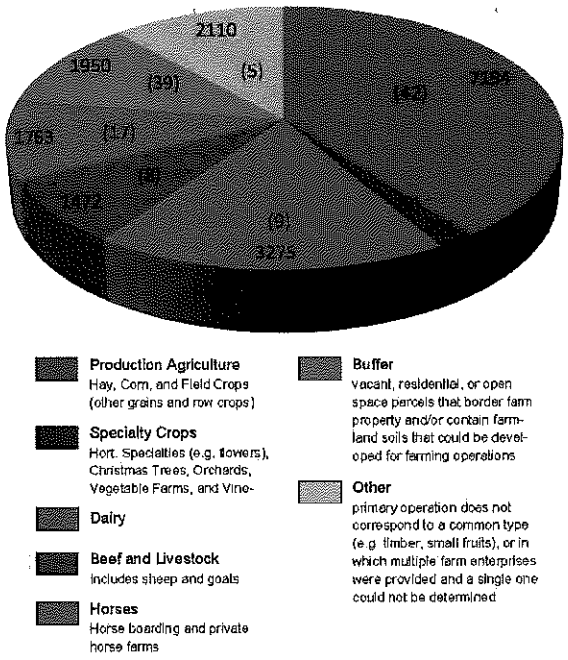


Figure 2. Acreage Distribution and Number of Farms by Enterprise Category

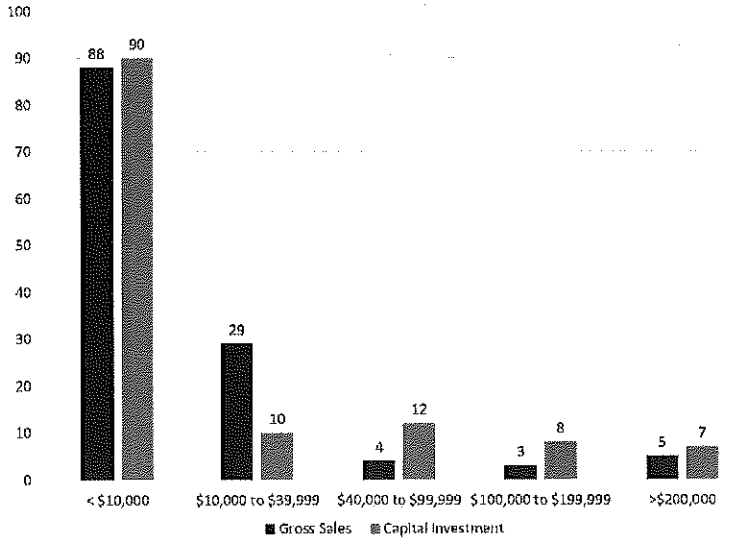


Figure 3. Number of Farms by Gross Sales and Capital Investment

The high number of farms in Amenia with less than $10,000 in annual sales and capital investment is somewhat skewed by agricultural "buffer" properties, which are typically not in agricultural production and don't generate sales nor require capital investment.

Cumulatively small farms generate significant dollars that are then spent on investments (equipment, vet fees, etc.) that fuel the local economy. Larger farm operations, although fewer in number, generate higher gross sales and capital investment. A considerable number of Amenia's farms (29) gross between $10,000 and $40,000, and 8 farms gross $100,000 or more (Figure 3). In addition, there were 12 farms in Amenia that spent between $40,000 and $100,000 in capital investments.

Sources:

Agricultural District Recertification Process 2007 for 2008 Recertification. Cornell Cooperative Extension Dutchess County. November 19, 2007.

Census and Demographics. Dutchess County Department of Planning and Development. Retrieved from http://co.dutchess.ny.us/countygov/departments/planning/plcensus.htm, September 2014.

CCEDC provides equal program and employment opportunities. The programs provided by this agency are partially funded by monies received from the County of Dutchess.

Elements of the Food Supply System

When discussing the role of agriculture in the local economy, it's important to be cognizant all of the elements that make up the food supply system. The food supply system, sometimes called the food supply chain, includes all of the processes and infrastructure involved in feeding a population. (The system also includes non-food agricultural products such as fiber and wood. The elements of the food system include:

- Land and structures needed for growing (soil, greenhouses, hoop houses, trellises)
- Supplies for planting (seeds, plants, fertilizers, herbicides, pesticides)
- Equipment for harvesting
- Labor for both planting and harvesting
- Processing, on-farm, or by a non-farm processing plant (cleaning, sorting, packaging, slaughtering, cooking, brewing, distilling)
- Transporting, either to a processor or directly to the consumer after on-farm processing
- Marketing and sales
- Consumption by the end user of the product
- Disposal or recycling of waste

Each of these elements, or 'steps' in the system are tied not only to the elements before and after, but to additional inputs and outputs outside of the chain. Farmers usually require outside assistance from an accountant knowledgeable about the unique requirements of a farm operation. The equipment farmers rely on is becoming more complex and automated, often requiring additional technical assistance and training.

FARM to TABLE
CO-PACKERS

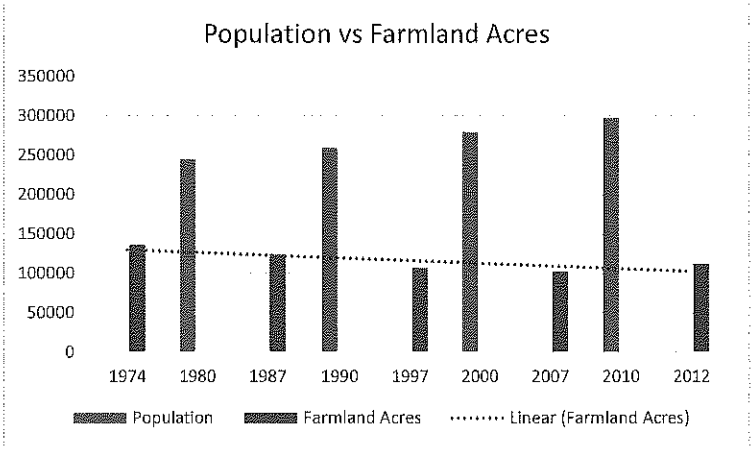
Farm to Table Co-packers is a full service contract packaging facility located in the heart of the Hudson Valley in Kingston. They work with farms to help them create value-added products from their produce and to connect food business with local farms. Farm to Table produces everything from jarred pickles, frozen IQF vegetables and fruit, meat products, pies, soups and sauces. They provide the equipment from mixers to auto fillers and capping machines to labelers and work with several Dutchess County farms. They are FDA and USDA Inspected.

In recent years, many farmers have been expanding their reach along the food supply chain. The reason for doing this is essentially an attempt to 'cut out the middle man', and allow the farmer to recoup some of the profits that previously went to those middlemen. The growth of farmers' markets, Community Supported Agriculture (CSAs), and on-farm value-added products are all examples of farm operations extending this reach. As farmers expand their operations along the food supply chain, they become more reliant on outside support services, such as marketing and food safety experts. They also become more integrated with the local economy and the social network of local consumers.

As some farmers attempt to maintain or improve their profitability by expanding their reach along the local food chain, others are expanding into regional and even global food networks. Essentially, these farm operations are maintaining profitability by growing in size, capitalizing on economies of scale. Larger farms are better able to maximize the productivity of employees, and more efficiently use equipment. Supplies and transportation costs can be negotiated at lower prices. It takes less effort to negotiate a single bulk sale to a large processor than it does to market and sell a smaller amount of product to hundreds of consumers.

Farmland Conversion Pressure

An increasing population can have a direct impact on farms. More people mean more homes and commercial development that can infringe on farmland. In the 1960s and 1970s, there was 28% population growth each decade (47,594 people). Since 1980, the rate has slowed and has remained between 6% and 10% per decade. Between 2000 and 2010, the County's population grew by over 17,000 people. Estimates[3] show that growth will slow to about 4% by 2020 and 1.8% between 2030 and 2040. Over time, as the population has increased, the amount of farmland has decreased county-wide from about 136,000 acres in 1974 to 113,000 in 2012 – a loss of 23,000 acres.



Population growth is not uniform throughout the County however. Southern Dutchess County has seen the most development. Between 2000 and 2010, East Fishkill, Fishkill, and Pawling grew the most in population and had double the county rate of growth (13.4%, 14.8% and 12.5% respectively). Moderate growth towns included Amenia and Red Hook (8% and 10% respectively).

[3] Cornell Program on Applied Demographics

Beekman, Clinton, Pleasant Valley, Union Vale, and Wappinger all had small to moderate growth rates between 6.7% and 7.9% during that time. Some of the towns with the most farm activity either lost population in the past decade or grew very slowly. These included Rhinebeck (2.8% loss), Pine Plains (3.7% loss), Milan (0.6% gain), and North East (1% gain).

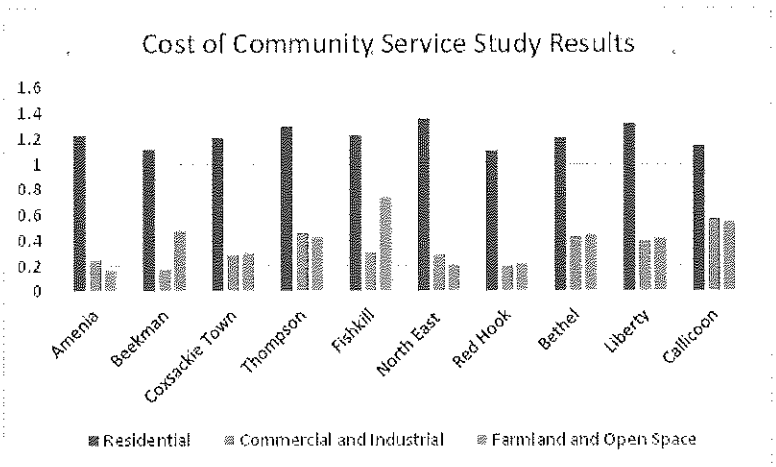
Looking at population growth does not convey the whole farmland conversion pressure picture however. Some communities experience development and conversion of farmland even without population growth. In Rhinebeck, Pine Plains, and Washington, for example, population decreased, but the number of new homes built increased. In fact, in all the towns where farming is still the predominant activity, the number of new homes built between 2000 and 2012 increased (see Table 4). This is another indicator of development pressure.

Table 4 – Growth Rates of Dutchess County Towns with Significant Concentrations of Farm Activity

2000 Population		Percent Population Increase 2000 to 2010	Number of Building Permits 2000 to 2012
Amenia	4,048	9.58%	96
North East	3,002	1%	103
Pine Plains	2,569	-3.7%	111
Red Hook	10,408	8.8%	236
Rhinebeck	7,762	-2.8%	370
Stanford	3,544	7.9%	159
Union Vale	4,546	7.3%	233
Washington	4,742	-0.02%	90

In Dutchess County, a combination of development pressure, land prices, cost of farming, and a suburbanizing population is transitioning many farms away from large, traditional farms, to smaller farms with direct sales. This is evidenced in the increase in the number of farms, decreased average size of farms, and loss of farmland overall.

The consequence of farmland conversion not only means a loss of farm production, open space, and loss of agricultural jobs; it also negatively affects County and town fiscal conditions. In general, most residential housing does not generate as much net revenue for a jurisdiction as it costs more to provide public services to it. Commercial development and farmland usually subsidize residential development to varying degrees. This makes farmland, even with a preferential tax assessment, a net fiscal positive and in many cases a preferred land use. "Cost of Community Services" studies commissioned by the American Farmland Trust and others and conducted throughout the Hudson Valley have found this to be the case.



These studies consistently show the differences in the actual cost of providing public services for residential, commercial/industrial, and farmland or open space land uses. For example, in Amenia, for every $1 collected in taxes it costs the Town $1.23 to provide municipal services to residential uses, but only 17 cents for farmland.

Agricultural Priority Areas

Agricultural businesses are inextricably linked to the quality, location, and condition of the land. While profitable farms are the best way to preserve farmland, other tools are needed long-term to address protection of farmland. Further, the New York State Department of Agriculture and Markets Circular 1500 sets an expectation that agriculture and farmland protection plans evaluate and discuss farmlands that should be preserved. For these reasons, Dutchess County has developed a process to identify important farmlands.

This section summarizes this process, and ends with a map (Map 8) depicting the county's priority agricultural areas using current data. A full technical description of the process can be found in Appendix 6.

To identify priority agricultural areas in Dutchess County, the following steps were taken:

Step 1: Identify Current farmland

Step 2: Define factors affecting farmland viability

The most important criteria defining agricultural viability are:

- The overall size (acreage) and amount of prime and statewide-significant soils present in an area; and
- The long-term viability, as measured by its existing agricultural designation (Agricultural Value Assessment, Agricultural District, or Forest Value Assessment), proximity to a core area of agricultural land, and the gross profit from and investment in the farm operation.
- These criteria were given the most weight in the analysis, and therefore parcels containing these elements received the highest scores in the analysis.

Other criteria were also included in the analysis as follows:

- Contribution of Soils to Agricultural Economy
- Consequences of Conversion
- Conversion Pressure
- Open Space Value
- Long Term Viability

Step 3: Rank and weight the viability factors

Each of the above criteria were weighted as to its relative importance to the farm economy.

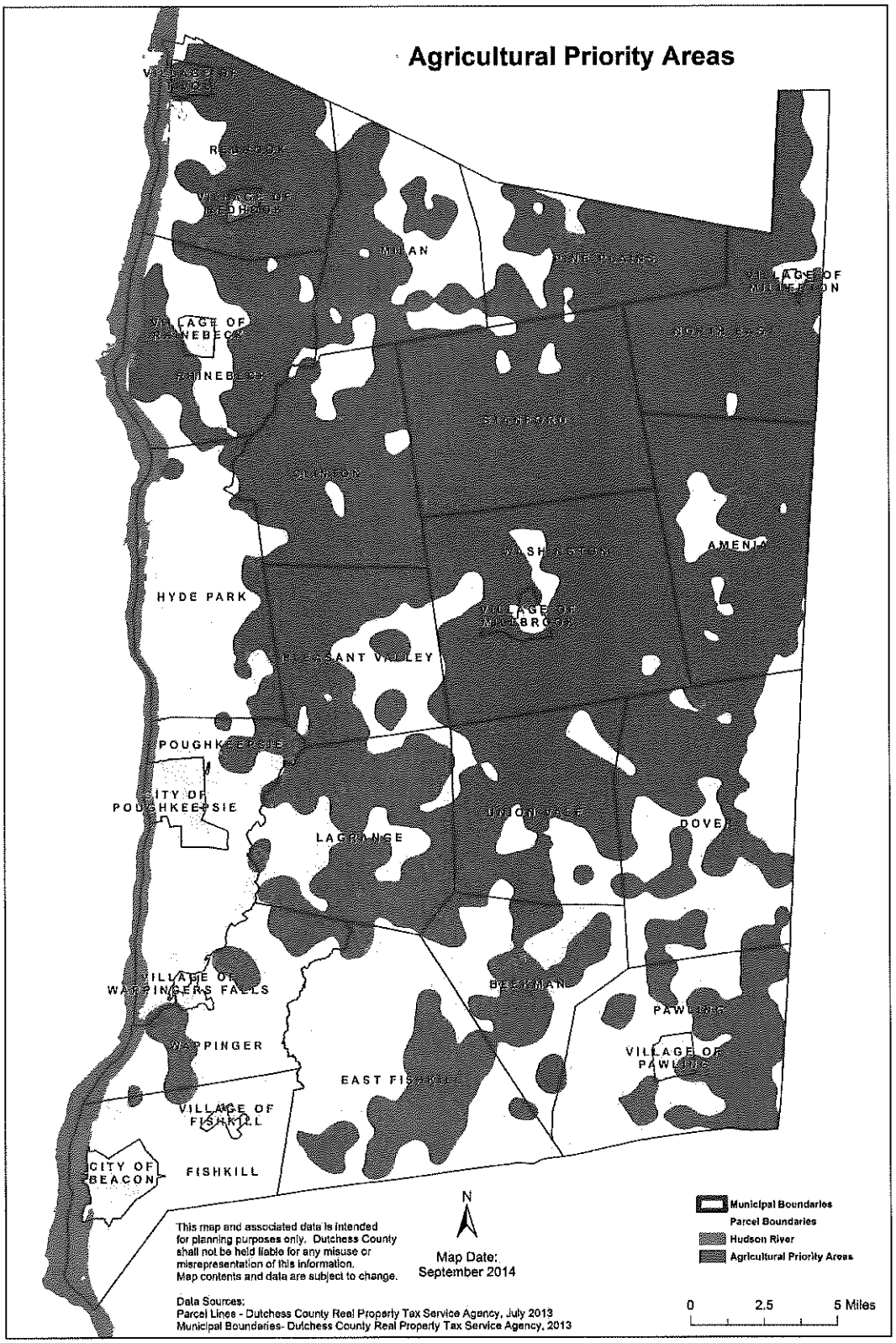
Step 4: Apply the measurements to the identified farmland

These scores were then added together for each farm parcel, and ranked. This score represents the agricultural economic viability of each farm parcel, and is used to produce the final Agricultural Priority Areas Map.

Step 5: Delineate and map the agricultural priority areas

The final step was to delineate the Agricultural Priority Areas based on the viability scores. The Priority Agricultural Area boundary was determined by selecting only those areas that received the highest 70% of scores. A full description of the mathematical formula used to apply the scores and map them is included in Appendix 6.

The Priority Agricultural Areas Map should not be interpreted to mean other areas not included do not have viable farmland. Due to the dynamic nature of some of the data used to produce this map, it will change over time. Farmed parcels can be added to the agricultural districts during the annual enrollment period, and the 8 year review. This map should be updated as new information becomes available.



Map 8 - Agricultural Priority Areas

Section 5 – Existing Plans, Programs and Initiatives

Planning for agriculture and farmland protection is not new to Dutchess County or the Mid-Hudson Valley region. Numerous plans, studies, and initiatives have been developed over the past two decades that directly or indirectly address agriculture. Agencies and organizations including, but not limited to the Dutchess County Department of Planning and Development, Cornell Cooperative Extension Dutchess County, the Dutchess County Soil and Water Conservation District, Dutchess Land Conservancy and other conservancies including the Scenic Hudson Land Trust and the Winnakee Land Trust, the Dutchess County Agricultural and Farmland Protection Board, and the Hudson Valley Agribusiness Development Corporation are all involved in the business of helping ensure our farms are profitable and sustainable. Through these efforts, a great deal of data has been collected to characterize agriculture's issues, needs, and strategies. This Plan attempts to update, integrate and build on those past and current efforts.

Appendix 11 contains an inventory of programs and resources that can and should be used in concert with this Plan. The intent is not to reproduce that information but refer the interested reader to those resources. However, it is important to identify the most relevant plans and studies that have been developed in the County and region. The following is a brief highlight of past and current efforts that address agriculture.

County-Level Plans Relating to Agriculture

1998 *Dutchess County Agricultural and Farmland Protection Plan* - identified five major areas needing attention to protect agriculture in the County. These were related to taxation policies, resource protection, local farmland protection strategies, marketing, and education. There are many similarities between the 1998 Plan and this current effort. The 1998 Plan called for establishment of an agricultural economic development position, property tax reforms, land conservation methods, agribusiness development, local municipal planning strategies and public education.

Agricultural-related plans and studies reviewed for this Plan were:

- Agricultural Assessment Program and Agricultural Districts Program: What are the Differences? (2010)
- Dutchess County Agricultural and Farmland Protection Plan (1998)
- Dutchess County Natural Resource Inventory (NRI) (2010)
- Dutchess County Profile, Cornell University Program on Applied Demographics (2013)
- Greenway Connections - Centers and Greenspaces Guide (2013)
- Greenway Connections, Greenway Compact Program and Guides for Dutchess County Communities (2000)

Regional Snapshot

Dutchess County is part of a region where much work has been done to study and promote agriculture. The past decade has brought a keen interest in farming, farmland protection, buy local, and local economies projects throughout the Hudson Valley. There are many agencies and organizations[4] working to that end and some have produced extensive, up-to-date and data-driven reports or studies.

Many of these organizations have long-standing programs and plans in place with a mission to improve and promote agriculture in the Valley. Important data, analysis and conclusions can be found within these other documents and this information should not be overlooked as the County works to implement its agricultural programs. Dutchess County is an active partner in this strong and diverse regional agricultural industry. The County recognizes the regional nature of both the agricultural economy and the programs needed to further support it. As such, a description of regional agricultural characteristics, issues and programs is included to strengthen mutual support and future sharing of services and programs that benefit farms across county boundaries.

This Plan references and incorporates many of the conclusions and recommendations of the following efforts:

- A Foodshed Conservation Plan for the Region, Scenic Hudson (2013)
- Agriculture-Based Economic Development in NYS: Trends and Prospects, Cornell University (2012)
- Agricultural Economic Development for the Hudson Valley – Technical Report and Recommendations, American Farmland Trust (2004)
- Agriculture Supporting Community in the Mid-Hudson Region, Discussion Brief #5, CRREO (2011)
- CEDS for the Hudson Valley Economic Development District, Hudson Valley Regional Council (2013)
- Cleaner, Greener, Communities Program - Mid-Hudson Regional Sustainability Plan (2013)
- Cultivating the Next Generation, American Farmland Trust (2014)
- FoodWorks: A Vision to Improve NYC's Food System, NYC City Council (2010)
- From Farm to Factory: Linking New York State Producers and New York City Food Processors, NYS Department of Agriculture & Markets (2011)
- Hudson Valley Food Hubs Initiative, Hudson Valley Patterns for Progress/ Local Economies Project (2013)
- Mid-Hudson Regional Economic Development Council: Strategic Plan (2014)
- Picking Up the Pace: A Road Map for Accelerating Farmland Protection in New York, American Farmland Trust (2007)
- Planning for Agriculture in NY: A Toolkit for Towns & Counties, American Farmland Trust (2011)
- Scaling Up: Strategies for Expanding Sales of Local Food to Public and Private Institutions in NY, American Farmland Trust (2012)
- The State of Agriculture in the Hudson Valley, Glynwood Center (2010)
- Understanding Food Systems: Identifying Business Opportunities for Hudson Valley Farmers and Food Entrepreneurs, Hudson Valley Agribusiness Development Corporation (2011)

A multi-county comparison is especially important considering that some priority projects are best suited for multi-county implementation. Organizations such as Cornell Cooperative Extension,

[4] See Appendix 11 for an inventory of these organizations.

Hudson Valley Agribusiness Development Corporation, the Glynwood Center and others already are supported by multiple counties, and offer programs across county borders. Further, Dutchess County has strong partnerships with the Columbia Land Conservancy with the FarmLink program.

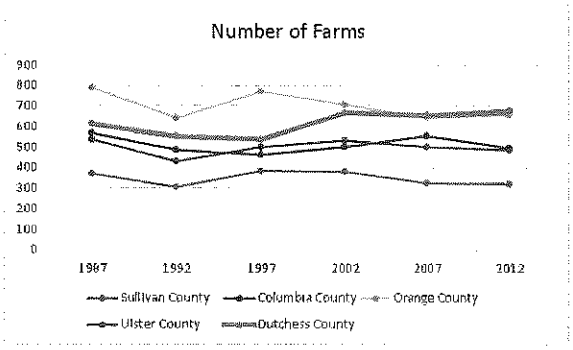
To offer a glimpse into the regional conditions, data from Columbia, Orange, Ulster, Sullivan and Dutchess counties is compared. The following outlines the state of agriculture in these five counties to provide a regional perspective. Appendix 2 details additional USDA Agricultural Census data for the past few decades for these counties.

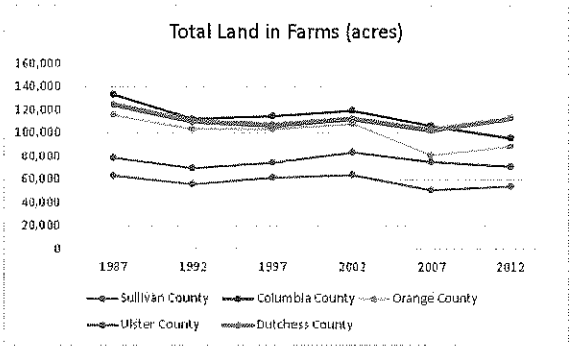
Highlights of the agricultural economy in the five counties include:

- In 2012 there were 2,637 farms in the five-county region. About 420,971 acres were farmed, and although that is down from the 1987 level of 514,365 acres, (a decrease of 93,394 acres), it is nearly a 5,400 acre increase since 2007.
- The rate of decline in the number of farms regionally has slowed since 2007.
- The total sales (in 2012 dollars) was $299.2 million. Taking into account the multiplier effect agriculture has (1.61 statewide), $299.2 million in sales increases to about $481.7 million ($299.2 million is the direct effect of agricultural production; $182.5 million would be the indirect and induced effects combined).
- There has been a large and steady increase in the dollar value of agricultural products sold directly to consumers.
- There has been a large and steady increase in crop sales, dominated by greenhouse and nursery crops.
- The number of dairy farms and amount of dairy and livestock sales continue to decrease across the region.

How Dutchess County Compares

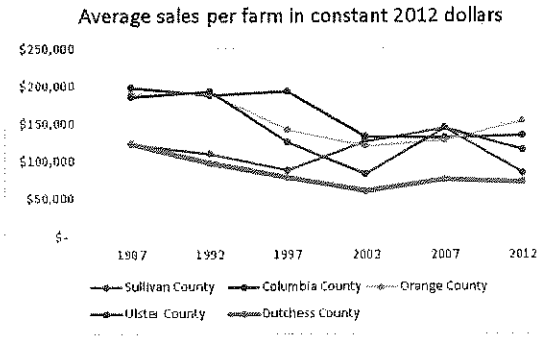
A comparison of Dutchess County with its Mid-Hudson neighbors offers further insight into agricultural conditions. This comparison also uses USDA Census of Agriculture numbers. It is recognized that this Census does not always include all farms or provide absolute data because

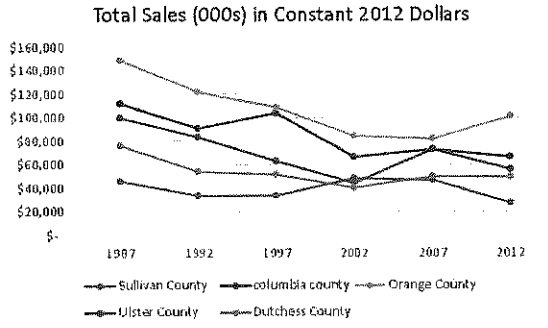




farmers voluntarily participate. However, it is often the only source for some county-wide data.

Dutchess County in particular is at the top in terms of number of farms and farm acreage compared to the others. However, the County's total sales and average sales per farm is in the middle to low range of the five, and half as much as Orange County. The average sales per farm in Dutchess County is lower than the other four counties, and this most likely reflects a larger number of small farms.





Dutchess is #2 in direct sales and saw a 262% increase in such sales between 1997 and 2012 with $5.6 million. There was about $23 million in livestock sales and that ranks # 3 of the five counties. The 35 dairy farms average 63 cows per farm which ranks #3 in the five counties, but that is much smaller than the average New York State farm (113 cows/farm).

The increase in direct sales, vegetable and nursery crops coupled with the loss of livestock and dairy farming is consistent with what the American Farmland Trust calls "farming on the edge".[5] As urban and suburban growth extends out into traditional farmland areas, agriculture in those locations changes from large and animal-oriented dairy and livestock farms, to smaller farms concentrating on crops conducive to sale directly to urban markets. This pattern is seen throughout the mid-Hudson valley.

The issues facing farms and farmers identified in Dutchess County are very similar to those found elsewhere in both the mid-Hudson Valley and throughout New York State. Numerous studies have discussed these regional needs and are referenced in this Plan.

[5] *Farming on the Edge*, by American Farmland Trust, 1997

Each county in the region faces challenges related to:

- Lack of institutional organization to coordinate and collaborate on needed projects;
- Lack of coordinated business retention and attraction programs, including developing new and taking advantage of emerging markets;
- Lack of food processing facilities and infrastructure;
- Similar technical training and business planning needs;
- Some duplication of efforts to address agricultural needs;
- Lack of funding for programs as well as insufficient mechanisms to help farmers understand existing funding opportunities;
- Lack of planning for farm transition and succession to the next generation;
- Lack of understanding of agriculture among the general public and elected officials; and
- Labor issues

Regional discussions have recently been initiated to explore common issues and mutual opportunities. There is recognition that some problems are better solved regionally. To address this, some recommended projects in this plan are identified as opportunities for regional implementation (see Section 8, Initiatives).

Section 5 - Strengths, Weaknesses Opportunities and Threats (SWOT)

SWOT - Strengths are internal resources and capabilities that affect agriculture in Dutchess County. Weaknesses are internal deficiencies in resources or capabilities that negatively impact agriculture. Opportunities are potential projects or programs that could be taken advantage of to improve agriculture and threats are external influences on agriculture coming from outside the county. All public input received and data collected were analyzed through this SWOT. In this way, the County has identified a variety of projects and actions that over time, can build on the strengths, take advantage of the opportunities, address weaknesses, and work to prevent the threats.

The SWOT is an important tool to help identify the issues that place barriers and challenges on farms and farmers. The issues facing agriculture are complex and interwoven. Understanding the strengths and weaknesses is a first step in planning to address issues and take advantage of opportunities. Using this SWOT will help the County outline the steps needed to maintain the strengths, enhance the negatives, take advantage of the opportunities and prevent threats from taking hold.

The SWOT was developed from public input received through meetings, workshops, interviews and surveys. It was also informed by the data and maps collected for analysis in this Plan. Some of the issues identified in the SWOT are longstanding and have been identified before in past plans and studies. While progress has been made and some of the economic trends are more positive now, there is still much that can be accomplished to improve agriculture in the County.

Some of the positives that have been identified and that form the foundation for successful agriculture include:

- There are numerous County agencies and organizations that service farmers and agribusinesses (SWCD, NRCS, CCEDC, HVADC, and DLC).
- The majority of actively farmed land in Dutchess County is certified for inclusion in the County's four contiguous Agricultural Districts. There is strong support for the district program among farmers and from the County government. Dutchess County's farmers are highly motivated, entrepreneurial, committed to their land, and determined to continue farming.
- The County's location in close proximity to NYC and other urban areas in New York State presents tremendous marketing opportunities. Dutchess County is also in close proximity the Boston, New York, Washington corridor - one of the largest population centers in the United States.
- There has been a greater degree of appreciation and support for agriculture of late, as well as a greatly increased interest from the public in purchasing fresh, local, healthy agricultural products.
- Farms are diversifying and there is a growing interest in small farms.
- There has been public support for open space and farmland protection programs.

Some of the issues that have been identified as needing to be addressed include:

- Lack of processing facilities
- Diversifying markets
- Efficient communications between farmers and agencies and networking
- Use of new technology
- A growing divide between local/organic/CSA/farm-to-table operations and the larger commodity producers
- Increasing reliance on rented land
- Shrinking budgets and staff of agriculture related agencies
- Lack of skilled labor
- Loss of farmland, and impacts of growth pressure and land conversion
- High cost of farmland and high operating costs
- Regulatory barriers at the local, State and federal levels
- Lack of a next generation of farmers
- Lack of awareness and understanding of agriculture on the part of the general public and municipal leaders

Section 6 - Vision for Agriculture

A vision statement is an aspirational description of what an agency or organization would like to achieve or accomplish in the long-term future. It is intended to serve as a clear guide for choosing current and future courses of action. Vision statements help create meaning and direction for stakeholders. Vision statements can serve as a guide for future actions and decisions. The vision statement helps delineate not only what actions should be taken but also what actions shouldn't be taken. Compelling visions can inspire, foster commitment, and motivate high levels of performance. Dutchess County's vision for its agricultural community is:

Dutchess County will have a diversity of profitable farms and agricultural businesses that will contribute significantly to the Dutchess County economy.

- Our farms will produce quality products that are in high demand, and accessible. We will take advantage of emerging markets for local farm products and have systems in place to best use our agricultural resources to meet those demands.
- Farms will take full advantage of the broader Hudson Valley, NYC metropolitan, and institutional markets to improve their financial success.
- New technologies and practices will be embraced on farms to enhance efficiency, profitability, and sustainability. Farmers will optimize the use of alternative energy resources.
- Core areas of permanently protected farmland will be established in the county's important farming areas.
- Dutchess County will be known as a location where young farmers are able to make a good living and we will attract new agricultural entrepreneurs.
- Agricultural educational programs oriented towards both schools and the public will be in place to increase public appreciation and awareness of agriculture.
- There will be a skilled labor force available.
- Towns will have farm-friendly policies in their local plans and land use regulations. They will put in place policies that respect the continually changing nature of farming and, at the same time, discourage incompatible development. Local tax policies will be fair for farmers and enhance farm viability.
- Programs will be in place to aid farmers in meeting other state and federal regulations.
- The County, farmers and farm-oriented organizations will work together in a collaborative way to support all these efforts.

Section 7 - Goals

A goal statement is a general declaration that describes a future state and gives the general direction, purpose, or intent of what should be achieved. Goal statements articulate what is achievable and define the general purpose of a future action.

The goals established for agriculture in Dutchess County are designed to help implement the broader vision statement. They are:

Agricultural Economic Development

- Diversify and broaden the agricultural economic base.
- Increase profitability and decrease costs of farming.
- Support and enhance marketing of agricultural products.
- Enhance the ability of farms to process and sell products locally.
- Identify and promote new markets for local agricultural products.
- Strengthen connections with wholesale, distribution, food processing, and institutional buyers to create more outlets for agricultural products.
- Increase direct and institutional sales regionally and in NYC.
- Increase agri-tourism opportunities and partnerships with state and local tourism agencies

Agricultural-related Services, Technologies

- Provide program and technical assistance.
- Continue to promote use of new technologies on farms.
- Enhance use of energy alternatives on farms.

Farmland Accessibility and Protection

- Ensure that quality farmland is preserved for farm use. Increase the amount of protected farm acreage, particularly prime farmland and soils of statewide importance.
- Increase affordability and availability of farmland for purchase or rent for farming use.
- Bring under-utilized farmland back into productive agricultural use.

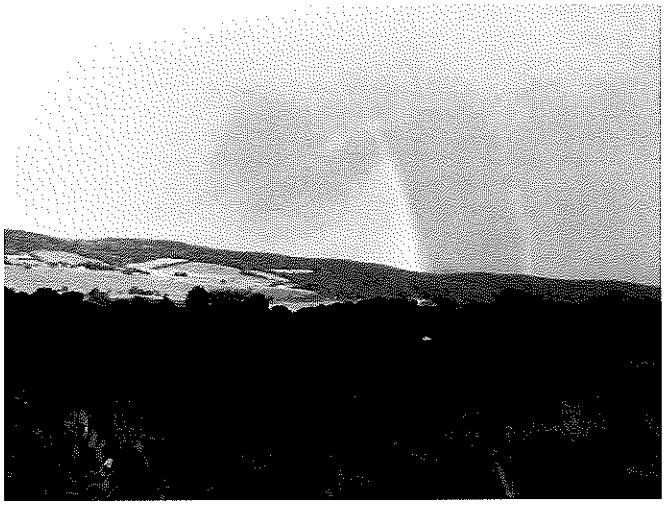
Regulatory Policies and Programs

- Reduce regulatory barriers and promote farm-friendly regulatory policies at the local, County and State levels.
- Develop favorable tax and assessment policies.

Public Awareness, Education, Communication, Collaboration

- Promote communication and collaboration among farmers, and between farmers and the public, organizations, and agencies.
- Increase education and public awareness about farming including education for municipal officials and the public about the importance of local farms to the local economy, tax base, and community character.
- Enhance educational opportunities related to agriculture for youth.

Section 8 - Initiatives



This Plan has generated an extensive array of proposals and strategies to strengthen and grow the County's agricultural economy. A majority of these proposals deal with improving the agricultural business system. Others address farmland protection, education, and regulatory improvement needs. While the need to protect farmlands will continue, the overall direction of this Plan is to set the stage for farms to be so successful that they can withstand the development pressure they may face in the future.

Five initiatives have been identified as critical to enhancing agriculture in the County. These are outlined below. For each, the Plan details actions within those projects that could be implemented. It also gives recommendations as to project sponsors, partners, cost, and time frame.

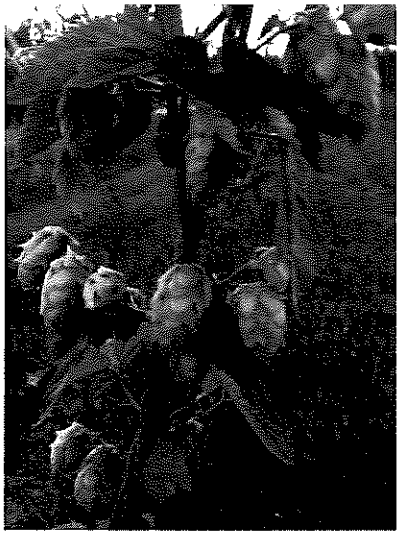
Initiative 1: Create an Agricultural Navigator Position.

This Plan recommends that an Agricultural Navigator position be formed in order to help farmers and agency personnel organize, analyze, publicize, promote, coordinate, and otherwise make full use of the information and tools available to and from the various agencies, programs, and regional entities that are involved with agriculture. Another prime task for this position is to take a lead role in coordinating agricultural economic development strategies to be implemented. The Agricultural Navigator may or may not be a new staff position. But it is recommended that a specific role be created for this purpose.

Unlike other businesses and economic development initiatives in the County and region, agriculture as an industry does not have a sole advocate to promote agricultural economic development. There is a need to have a voice that coordinates and encourages collaboration and sharing to address gaps in services and needed programs. The County needs to develop the capacity, communication, and collaboration to make that happen.

Options and criteria to be considered for implementing the proposed 'Agricultural Navigator' Position.

In order to put this into place, there will need to be discussions about available staff at the County level and in other regional organizations that may be able to fill this role, along with identification of specific tasks and development of a scope of work. A regional position should be considered. (See Appendix 8 for a sample job description.)



There are several options to consider staffing this position through:

- Cornell Cooperative Extension Dutchess County
- Dutchess County Agricultural and Farmland Protection Board
- Dutchess County Economic Development Corporation
- Dutchess County Industrial Development Agency
- Dutchess County Planning and Development
- Dutchess County Soil and Water Conservation District
- Hudson Valley Agribusiness Development Corporation (HVADC)
- Other Agencies and Organizations

Each option should be evaluated using the following criteria:

- Existing staffing or new – are there staff that can be re-assigned or would another person need to be hired? Related to this question is whether existing staff have the experience that matches the needs for the position or does the position require someone new?
- Budget – where can funding come from? That funding source may help target the appropriate agency to house the position. Could existing regional agencies expand their services if funding could be identified? Could a CFA application be written to fund a regional initiative?
- Location – Which agency is the most likely to be visible and accessible to farmers, farm-related agencies and organizations, and others that need to be involved to make this work? In other words, which agency is best suited to get this program up and running and accepted most effectively?
- Consistency with Agency/Organization Mission - Whether an agricultural navigator meets the mission of the department/agency. Can the position fit comfortably within the existing nature of the agency/organization?
- Ability to administer and house this position in the County and community long-term? This position will require longevity to be most effective.
- Should this position be housed within a public/government-funded agency vs. the private sector?

The strategies and actions the Agricultural Navigator can address and help implement include:

- Coordinate the recommended agricultural business retention and expansion program.
- Report regularly to and communicate with the County Executive's office, Dutchess County Agricultural and Farmland Protection Board, HVADC, Dutchess County Economic Development Council, Dutchess County Tourism, and other agencies and organizations involved with agriculture.
- Advocate for policy changes and work with other agriculture related entities such as Farm Bureau in the County and region to help understand, improve the agricultural economy and that helps ensure farmers get a fair price for their products. Other topics needing advocacy include labor laws, hiring requirements, and fair dairy pricing policies.

Project Partners

County Executive's Office
Cornell Cooperative Extension Dutchess County
Dutchess County Agricultural and Farmland Protection Board
Dutchess County Economic Development Corporation
Dutchess County Industrial Development Agency
Dutchess County Planning and Development
Dutchess County Soil and Water Conservation District
Dutchess Putnam Westchester Farm Bureau
Hudson Valley Agribusiness Development Corporation
Regional Agencies and Organizations
Surrounding Counties

Timeframe:

Short to Moderate

Initiative 2: Develop an Agricultural Economic Development and Business Retention and Expansion Program.

It is clear that there needs to be a concerted emphasis on agricultural economic development.

- Initiate an Agricultural Business Retention and Expansion Program. Business retention and expansion is considered to be one of the core components of an effective economic development program. In contrast to business attraction - bringing new businesses into the community - business retention and expansion (BR&E) programs focus on existing businesses. The premise is that it is far easier to retain and grow a business that is already located in the community than to recruit a new one from somewhere else.

BR&E depends heavily on a customer service orientation. A successful agricultural BR&E program begins with an effective farm business visitation program. These visits put economic development staff in direct contact with farmers and agri-business leaders, and provide useful information on the status of individual business needs.

An Agricultural BR&E Program would send the message that the retention and expansion of farms is a County priority. It would also provide a mechanism for tracking the local agricultural sector and responding quickly to any issues or concerns. Visiting farms, rather than waiting for farmers to contact County agencies, is a proactive approach, providing opportunities to directly deliver information and resources to farmers, and to solve problems as they arise.

Project Components

The purpose of a BR&E program is to regularly communicate with local businesses in order to understand, anticipate, and ultimately address their needs, challenges, and opportunities. Typical BR&E activities include:

- Developing and maintaining a business database;

- Engaging in ongoing communications to inform businesses about potential resources and learn about their needs, through e-newsletters, websites, surveys, face-to-face meetings, roundtable discussions, etc.; and
- Working with a proactive team of professionals that can develop and/or make referrals to resources that support business growth and address issues.

Agricultural economic development and all BR&E activities should be supported by the Dutchess County Economic Development Corporation, the Dutchess County Industrial Development Corporation, HVADC, and/or a specially formed volunteer committee. Whichever group is tasked with implementing this part of the plan should work closely with the proposed Agricultural Navigator.

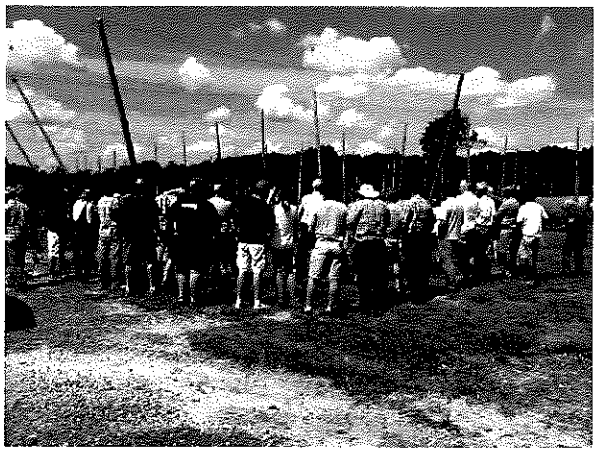
As an example, Swift County Minnesota created a farm BR&E program that was administered by a local leadership team. Made up of residents representing business, farming, and consumer interests, the team had five objectives:

- *Assess the needs of agricultural producers,*
- *Help solve the immediate concerns of agricultural producers,*
- *Explore alternative agricultural ideas, cooperation ventures, and diversity of agricultural production operations, including livestock,*
- *Create a support base and network among communities, government, business, and agricultural producers, and*
- *Educate about the role of agriculture in the community.*

Working with a local university, the team designed and implemented a survey instrument with questions focused on issues that lent themselves to local action. Some farmers were subsequently referred to specific organizations that could meet their immediate needs. The input received was also used to identify priority areas for action.

The Agricultural BR&E Program coordinators must have strong communication skills, working knowledge of the programs and resources available to assist farmers and agribusinesses, and the ability to collaborate with a wide range of agencies and organizations. Depending on an individual farmer's needs, a staff person may be needed to provide direct technical assistance, act as a broker between the farmer and a service provider, or package several forms of assistance available from multiple providers. Depending on available funding and the level of personal interaction required, this staff person might be filled by the Agricultural Navigator described above or a full or part time staff person that answers directly to the group. The HVADC could also fill this role if additional funding is provided by the County or another source.

BR&E Action Steps

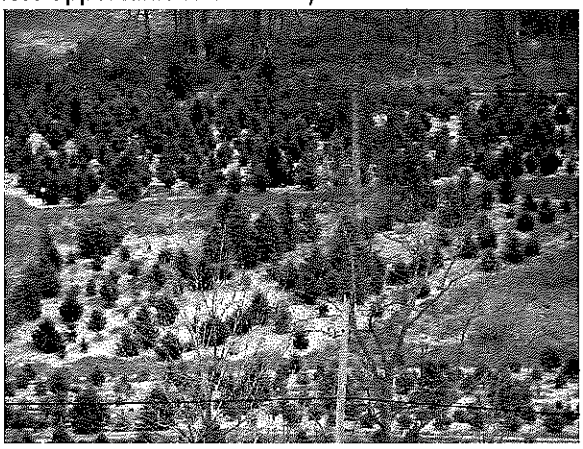


1. Determine how program will be administered – redeploying existing staff vs. hiring new staff? Which agency or organization? If a voluntary committee, who will be on it?
2. Recruit volunteers or hire staff.
3. Develop initial database of farms in Dutchess County, using mailing lists and records from organizations such as Cornell Cooperative Extension, chambers of commerce, county agencies, etc. Confidentiality must be assured.
4. Develop a business visitation program: identify the types and sizes of farms to be surveyed annually, establish visitation schedule, create visitation/survey questions, and contact farm operators. If program will be administered by a committee, provide business visitation training.
5. Since it is impossible to visit every business in the short term, a risk assessment should be completed; this essentially triages farms and helps identify the farms that are most at risk of failure.
6. Update database records accordingly.
7. Collaborate regularly with agency partners to provide referrals, follow-up, etc.
8. Develop marketing tools, including a website with links to programs and resources for farmers.
9. Work with agency partners to develop other communication tools: press releases, newsletters, e-blasts, etc.
10. Other activities could include regular roundtable discussions, seminars, and networking opportunities.

In addition to and supportive of the Agricultural BR&E program outlined above, other recommended economic development strategies and actions include:

- Expand the mission of the Dutchess County Economic Development Corporation so that it can take on additional agricultural economic development roles.
- Continue to fund and support HVADC in its efforts to work with farmers on economic development needs. Work with HVADC to help farmers secure access to financial support for business expansion or start-ups.
- Develop and administer a farm business planning and training program which addresses planning for diversification and expansion, current operations, and estate and succession planning. This could include recruiting and organizing an agribusiness SCORE (Service Corps of Retired Executives) panel to review plans and be available to advise growers as needed.
- Identify options and offer incentives for farm expansion and new start-ups. Work with individual farmers to help them secure access to financial support for business expansion and diversification. This could include a grant writing clearing house, and opportunities to purchase additional farmland at reasonable cost, including land priced at its agricultural value.

- Coordinate farm management efficiency programs to reduce costs. Facilitate adoption and use of cost-reducing energy alternatives on farms and facilitate farm buyer's cooperatives to reduce costs.
- Work to expand existing or initiate new farm incubator programs.
- Work closely with other Hudson Valley counties and coordinate economic development efforts regionally. Identify regional-scale projects that would benefit all participants.
- Work with Dutchess County Tourism to build on its existing agri-tourism program. Promote opportunities with a concentration on promoting wineries, microbreweries, farm markets, farm-to-fork restaurants, and a beer trail that complements the Dutchess Wine Trail. Collaborate with the State, Dutchess County, and Hudson Valley Greenway tourism programs to promote and schedule tour visits to County farm stands, farm tours, bed and breakfast accommodations, and horse farms.
- Projects that would be beneficial include:
  - Create agri-tourism packages
  - Create a unified county sign and wayfinding system
  - Use technology such as interactive maps, phone applications as part of marketing.
- Implement a marketing and public relations initiative oriented at labeling Dutchess County local foods and products. This not only expands opportunities for farmers, but also serves to educate the public about the importance of local farms. This program ties directly to a buy-local effort such as expanded farm-to-institution and farm-to-table programs. Other options to expand market opportunities for Dutchess County farms include working regionally to take advantage of opportunities such as Amy's Kitchen in Orange County, developing an online 'local food' marketing program to augment existing direct sales and CSA operations (see Schoharie County as model), and facilitating marketing more Dutchess County produce in New York City, the Capitol District, and other urban areas. This latter effort requires work on aggregating and transporting products via food distribution hubs.
- Work with CCEDC and SWCD to identify continuing and emergent market trends and needs for agricultural products. Ensure technical training needs are available to help farmers gear up to meet these needs. Communicate these business opportunities to county farmers.
- Work regionally to determine feasibility and identify locations for food processing facilities to increase the infrastructure to process, grade, and pack and add value to farm products and services. Encourage investment in development of Dutchess County Food Hubs by private enterprise. Of special importance should be for slaughterhouse and secondary meat processing facilities, small grain and hops processing, processing kitchens, and milk processing. Some of the options that should be explored for viability include:



  - Investigate a single or several small slaughterhouses to support livestock processing and packing operations.
  - Promote and facilitate financing of more breweries, wineries, and distilleries to add to the value of farm grain and vineyard production, and to stimulate increased production of the growing demand for hops and other grains by the craft brewing industry.

  - Develop a commercial kitchen to cater to small farm needs with the help and guidance of the Culinary Institute of America.
  - Develop a local fiber mill to support the growing sheep and wool farmers.
- Continue to provide technical education for farmers. This requires continue funding of CCEDC and DCSWCD and support of the Highland Research Lab to provide production agriculture and other needed technical support programs. Technical programs should meet the needs identified in this Plan such as new farmer start-up programs, providing dairy and other crop production support programs, providing estate and succession planning and training, and providing business planning education.

Project Team/Partners

Dutchess County Economic Development Corporation
Dutchess County Industrial Development Agency
Dutchess County Planning and Development
Dutchess County Tourism
Hudson Valley Agribusiness Development Corporation

Time Frame:

First year after adoption for BR&E Program; Short to Moderate Term for others

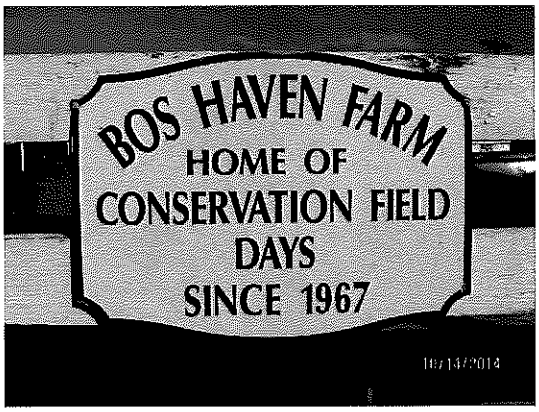
Initiative 3: Farmland Preservation and Accessibility Program

In order to be as cost effective as possible, it is important to invest in land conservation projects now, while land values are comparatively low. It is highly unlikely that it will ever be possible to purchase the development rights on all of the most critical farmland in Dutchess County, and for this reason, it is important to consider a broad range of alternatives such as the lease of development rights and affordability covenants.

- Ensuring that local farmers continue to have opportunities to access Purchase of Development Rights (PDR) funding from multiple sources is critical to the farm economy of Dutchess County – both for preserving the agricultural land base and for making capital available to working farm operations. Local, municipal, or County matching funding opportunities will continue to be critical to the success of PDR projects. Municipalities should be encouraged to follow Red Hook's example in developing a strategy for protecting farms and creating funding sources that can leverage other available resources. Judicious and balanced use of County funding for PDR purposes should also be considered – especially where there is an opportunity to leverage funding from outside sources bringing state, federal and private dollars into the local farm economy.
- Farm Conservation Organizations / Land Trusts are encouraged to continue to expand their working partnerships in order to leverage existing resources and coordinate fundraising and grant opportunities. New funding sources to finance farmland preservation projects such as those associated with the New York City Foodshed (See Appendix 7), should be sought and cultivated. Other funding sources might include a regional critical farms fund, agricultural angel capital network, equity trusts, and local community foundations.
- Initiate a Lease of Development Rights Program (LDR) based on the NYS Incentive Payment program, and encourage and assist organizations that are willing to work with farmers on term leases and payments by the State's new funding program. While LDR does not provide

the permanent protection that PDR does, it can provide a measure of more short term protection, allowing the land to remain as farmland until a farmer decides that he wants to commit to permanent protection, and/or until funds can be raised for purchase of development rights.

- Encourage and assist organizations and agencies that are willing to enhance conservation easements with Affordability Covenants (also known as Options to Purchase at Agricultural Value, or OPAV). Research potential funding sources for these projects, which have the potential to reduce the entry barriers for new beginning farmers to purchase land.
- Identify opportunities to create and/or build upon existing core areas of preserved farmland – such as Red Hook's "Bread Basket" – in each of the County's farming communities.
- Expand and support the existing Farmer/Landowner match programs including the Dutchess Land Conservancy/Columbia Land Conservancy, the Winnakee Land Trust and the American Farmland Trust Hudson Valley FarmLink Programs.
- In conjunction with the Dutchess County Planning Department, the County Agricultural and Farmland Protection Board should evaluate the viability of the following additional options for farmland preservation and for keeping farmland open and viable:
  - Transfer of Development Rights Programs (TDR) feasibility and opportunities.
  - Cost-share programs that promote sustainable agricultural practices and facilitate watershed management.
  - Equity building opportunities for new/young farmers while leasing farmland to encourage them to remain in their local communities.
  - Greenway Centers and Greenspace Policies to promote smart growth.
  - Greenway Connections guides oriented to farmland protection including use of TDR, agricultural overlay districts, and comprehensive plans.
  - Streamline public review processes and reduce the total time required to complete municipal- or county-funded farmland protection projects.



Project Partners

Dutchess County Department of Planning and Development
Dutchess County Agricultural and Farmland Protection Board
Dutchess Land Conservancy
Oblong Land Conservancy
Scenic Hudson Land Trust
Winnakee Land Trust
Dutchess County Municipalities
USDA Natural Resource Conservation Service (NRCS)

Time Frame:

Enhance funding sources starting first year, LDR and local preservation programs short to moderate term, others moderate term to ongoing.

Initiative 4: Farm-Friendly Local Regulations

Local regulations, including subdivision and zoning laws, can influence farm operations in a variety of ways. Zoning should help put into effect the community's plans for future development, including farm operations. It can help prevent development from moving into prime farmland areas, allow for a variety of agricultural uses, and establish development guidelines that address how open space and natural features are protected. Zoning is also designed to ensure the health, safety, and welfare of residents. Sometimes though, there are conflicts between the different purposes zoning is trying to accomplish. Zoning can place unnecessary barriers to farming by unreasonably regulating farm operations with strict standards such as large setbacks, minimum acreage requirements, lengthy permit procedures, and limitations on the number and type of farm animals. The zoning audit done for this Plan showed that in some communities, the comprehensive plan establishes farm-friendly goals, but the zoning places regulatory barriers that are not farm-friendly.

Other regulatory issues can arise when farm operations are enrolled in New York State's Agriculture District Program. The Agricultural Districts Law limits unreasonable local regulations on farm operations located in those districts that also meet the requirements of Agricultural Value Assessment. Local governments may not enact ordinances or local laws that would restrict or regulate farm structures or farm practices beyond the requirements of health and safety. Careful attention needs to be paid to regulations as they are applied in and outside of agricultural districts.

Beyond the actual law, the proper administration of zoning is also important. Effectiveness of any local law depends on the people who administer it. Many communities in Dutchess County no longer have any farm representation on planning boards, zoning board of appeals, or even town boards. At a minimum, having farmers involved in local planning decisions will help inform and ensure that agricultural needs are addressed.

It is also highly recommended that each town, especially those with significant farm activities, have citizen and farmer involvement to advocate for local programs that support and promote farming. Appointment of a local Agriculture Advisory Committee, as recommended below, can go a long way to providing an ongoing, local voice for agriculture (See Appendix 8 for a model resolution to set up local committees).

Action Steps

Dutchess County Planning and Development and the Agricultural and Farmland Protection Board should work together to:

- Encourage Towns to appoint farmers or people knowledgeable about farming to local town planning boards, zoning boards of appeal, and planning committees.
- Provide data, maps, information, and training on their use to towns.

- The Dutchess County Planning Federation could sponsor agriculture-related training sessions to fulfill the 4-hour per year requirements for Planning Board and ZBA members. There could be collaboration between agencies and organizations to provide similar trainings regionally.
- Work with local municipalities to remove regulatory barriers. Use the zoning audit report in this Plan as a guide to what regulations need to be updated or amended. County Planning should advocate for and provide assistance to local municipalities to help develop local plans and land use regulations that are supportive of farms and farming activities.

Strategies and actions a farm-friendly local regulation program can address and help implement include:

- Promote and implement Right-to-Farm laws at the town level.
- Promote adoption of farm-friendly land use regulations.
  - Work to create 'scale-appropriate' regulations for small operations.
  - Provide model language and ongoing training for Planning Boards and ZBAs.
- Provide ongoing training to planning boards, ZBAs, assessors and town boards
- Use innovative methods such as webinars rather than centralized meetings to bring education to these audiences.
- Encourage towns to appoint local Agricultural Advisory Committees to advocate for agriculture and help ensure that town's farm-friendly intentions are carried out (see Appendix 8 for model scope of work for such a committee).

Project Partners

Dutchess County Agricultural and Farmland Protection Board
Dutchess County Planning and Development
Dutchess County Planning Federation
Municipalities
New York State Department of Agriculture and Markets

Time Frame:

Short-term for initial implementation, ongoing thereafter

Initiative 5: Expand education and awareness programs.

There are a variety of education-oriented strategies that are needed in Dutchess County. Farmers and farm-related agencies and organizations have identified lack of understanding of the role agriculture plays in the life and economy of Dutchess County as a weakness. Lack of understanding often leads to farms and other agricultural businesses being undervalued in terms of their economic contribution. As a result, agriculture is usually not one of the industries targeted by economic development organizations at either the county or regional levels. This strategy is aimed at helping people understand the role of agriculture which will ultimately help in integrating agriculture as a significant industry in County economic development efforts.

Another education-related initiative is to help promote agriculture as a viable career path in the County. Coupled with the economic development programs oriented to new and young farmers suggested in other strategies, this set of strategies is designed to help promote understanding of the food system and agricultural opportunities, and to convey the positive career path farming can be.

A more robust mentor and apprenticeship program to attract new farmers to Dutchess County would help overcome the issues associated with an aging farm operator population.

Project Components Should Include:

- Develop an outreach program targeted to helping educate municipalities and the public about the importance of local farms to the local economy, tax base and community character. As part of this initiative, use pertinent and up-to-date economic data that shows the positive impact farms have on local communities as businesses, and what happens to the local economy if these farms are developed or transitioned to other uses. The *Municipal Profiles* maintained by CCEDC are an excellent resource for this information.
- Develop a Dutchess County Mentor/Apprenticeship Program or work with similar regional programs to establish mentors and apprenticeship opportunities on Dutchess County farms.
- Promoting new farmers begins with promoting agricultural education and awareness of agriculture as a viable career path. Support 4-H programs through CCEDC and the expansion of FFA programs in high schools and BOCES; enhance agricultural literacy in schools and community colleges to promote farming as a viable career choice.
- Partner with organizations including the Dutchess County Planning Federation and the Northern Dutchess Alliance to sponsor outreach programs and training for municipal board members and local officials.

Project Partners

Cornell Cooperative Extension Dutchess County
Dutchess County Agricultural and Farmland Protection Board
Dutchess County Planning and Development
Dutchess Putnam Westchester Farm Bureau
Glynwood Center
Hudson Valley Agribusiness Development Corporation
Land Conservancies
School Districts and BOCES

Time Frame:

Medium-term

Section 9 – Implementation

The organization responsible for developing and implementing the Plan is the Dutchess County Agricultural and Farmland Protection Board (AFPB). But the Board is neither charged by its mission nor staffed to undertake the strategies needed to strengthen and expand the multi-product, small to mid-sized agribusiness structure of the County's economy. However, there are opportunities to move forward by involving existing agencies and organizations. This section offers a checklist of steps that should be taken to implement the outlined five strategies.

The priority initiatives identified in this plan should be those that the County and its partners concentrate on implementing. This section outlines specific tasks that should be taken to establish the organization, communication, reporting, and funding mechanisms needed to implement specific projects.

Projects will be initiated through input of the Agriculture and Farmland Protection Board, with leadership and support from an agricultural implementation committee, and eventually, the Agricultural Navigator as recommended under Initiative #1. An important feature of this plan is the recognition that neither the County nor any single agency can implement the projects alone. Many agencies and organizations, both within the County and throughout the region, have important roles to play.

The following steps are recommended to begin successful implementation of this plan:

1. Improve communication, collaboration, and cooperation among all those involved with agriculture, including farmers, county agencies, farm support agencies, other local and regional stakeholders.

    - Support the leadership efforts of the AFPB by creating an Agricultural Advisory Committee. Its main role is to coordinate between private and public agencies and organizations in the County to help clarify missions as they relate to this plan, coordinate so that there is no duplication of services, and assist in finding funds for critical programs. The Agricultural Advisory Committee can help determine how and who assumes responsibility for implementing programs that would strengthen and grow the agricultural economy.
        - The Committee should be made up of five people representing agencies and organizations that are involved in agriculture and business.
        - This Committee will assist in keeping track of implementation and organizing specific project partners to move projects forward. In the future, the Agricultural Navigator would also be a key contributor to this Committee.
        - There should be a single chairperson or director that reports directly to the County Executive.
        - The Committee should focus on priority initiatives to help with the nuts and bolts of implementation and work with project partners for each priority project.
        - For each specific project, other County agencies, organizations, representatives of the agricultural sector, and other partners should be tapped to help the Committee with implementation efforts. This is an opportunity to target the specific interests and expertise of farmers, agri-businesses, and other organizations in the County.

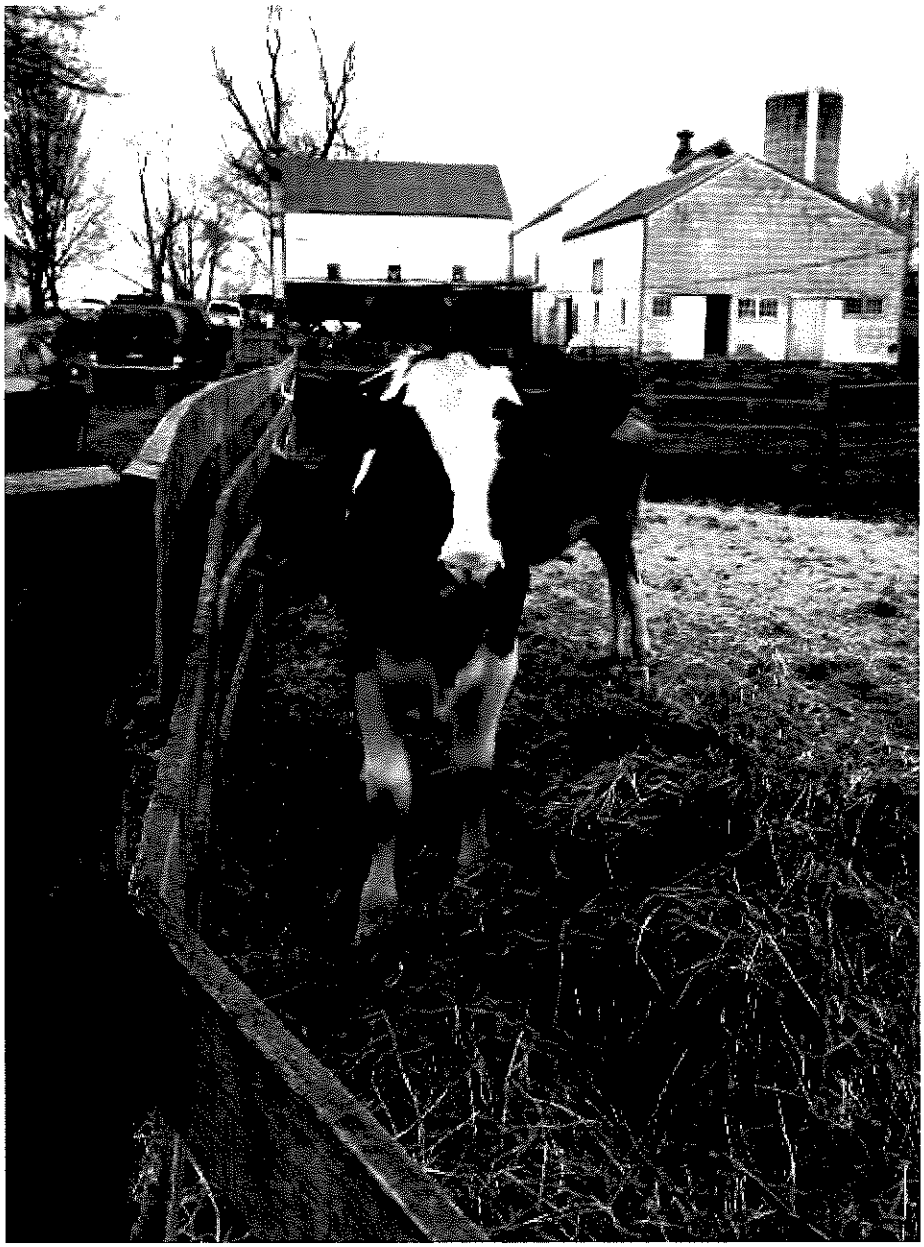
- Work with other organizations and agencies to 'assign' tasks and begin implementation. Hold twice-per-year update sessions with all partners together to keep progress on track. Report regularly to the AFPB and County Executive.

2. Continue dialogue and planning with neighboring counties. Consider scheduling quarterly multi-county meetings to facilitate more coordination and implementation or regional projects and approaches.
3. Work with neighboring counties to identify one or more priority projects suitable for a New York State Consolidated Funding Application.
4. Keep this Plan current and consider a short review and update along with the 8-year Agricultural District reviews. This process can be facilitated by asking for annual progress reports to be submitted to the AFPB and/or County Executive on implementation progress from the Committee. The County and its partners should also regularly note emerging issues and trends. In this way, any plan update can be made more efficiently, more rapidly fill gaps in programs, and readily report progress and needs to the County Legislature and public.
5. The following steps should be taken to guide implementation of each project:
   - Confirm goals and objectives of the project.
   - Identify users/beneficiaries of the project.
   - Identify partners to help implement.
   - Identify a lead agency or project coordinator.
   - Create a task list of items to be accomplished.
   - Make assignments of people or agencies to each task, or form working groups.
   - Establish a time frame and time table to get specific steps done.
   - Outline reporting mechanisms so that working groups or people/agencies report and communicate with each other.
   - Estimate costs for each step.
   - Identify grants and other funding sources that can be tapped into.
   - Disseminate information on the project as per this plan.
6. The AFPB and its partners should advocate for the eventual creation of the Agricultural Navigator to coordinate implementation and agriculture economic development activities. A shared/regional coordinator or circuit rider may be a feasible option, at least to start with, and this should be evaluated as an option. This is discussed in more detail in Priority Initiative 1.
7. Critical project components that constitute a plan of work for 2015 and 2016 are summarized in Table 5.

Table 5 – Initial Implementation Steps

Date	Implementation Step	Explanation
	Initiate the BR&E program and decide what agency or organization is best suited to administer this and secure funding.	Take action steps outlined in Initiative #2 of this Plan
	Produce/Update Municipal Profiles for each community	Continue to follow through on development of these profiles using County data (See example from Amenia in Section 4).
	Develop an agriculture-oriented training program with materials to guide Planning Boards and ZBAs in the County	Convene training sessions for Planning Boards and ZBAs to keep them current on agricultural issues.
	Meet with Glynwood Center and other organizations to expand mentor and apprenticeship programs	Discuss how mentorship and apprenticeship programs in Dutchess County can be initiated and expanded.
	Develop a marketing tool that conveys the positive state of agriculture	Develop public relations tools that convey the importance of agriculture to the economy and quality of life for municipal and legislative audiences. Provide support for annual updates of the CCEDC "It's a Growing Thing" brochure.
	Hold an annual summit of agriculture	The DC AFPB and County Planning can organize an annual summit meeting where all agencies and organizations can gather to report on progress, identify issues and challenges, fil needed gaps, assign new tasks and plan to keep implementation of the plan on target.

Section 10 – Appendices



Appendix 1. Terminology

Agribusiness refers to a business involved in the producing operations of a farm - the manufacture or distribution of farm equipment, farm supplies, the processing, storage, or distribution of farm commodities.

Agricultural Districts are formed according to New York State Agriculture and Markets Law 25-AA when interested landowners collectively own at least 500 acres used for farm purposes. Districts are approved by the County legislature and reviewed every eight years. Farms in agricultural districts receive important right to farm protections, limited taxation of farmland for certain municipal improvements, defense against nuisance lawsuits, and additional measures.

Agricultural Operation refers to the land and on-farm buildings, equipment, manure processing and handling facilities, and other practices which contribute to the production, preparation, processing, and marketing of food, crops, livestock and livestock products, timber operations, commercial horse boarding and equine operations, composting, and biomass crops.

Agricultural Value Assessment is the value of agricultural land used for assessment purposes. It provides 'use value' assessment for eligible farmland and allows it to be assessed based on its agricultural value, rather than its full market value. Farmlands must qualify for an agricultural assessment according to section 304-a of this Article 25-AA of the New York State Agriculture and Markets law.

Agriculture typically refers broadly to any land use activity that produces or supports food, crops, fiber, greenhouse products, animal husbandry and products, timber, and other goods and products from the land.

Farmland is the land used primarily for bona fide agricultural production for commercial purposes of all those items and products.

Farms are the locations where these agricultural activities take place. They may consist of one or more parcels of owned or rented land.

Farm Operation: "the land and on-farm buildings, equipment, manure processing and handling facilities, and practices which contribute to the production, preparation and marketing of crops, livestock and livestock products as a commercial enterprise" as defined by New York State Agriculture and Markets Law 25-AA. Such farm operation may consist of one or more parcels of owned or rented land, which parcels may be contiguous or noncontiguous to each other.

Options to Purchase at Agricultural Value (OPAV) are provisions included in agricultural conservation easements that enable the organization holding the easement to require that farmland be sold only to farmers for continued production.

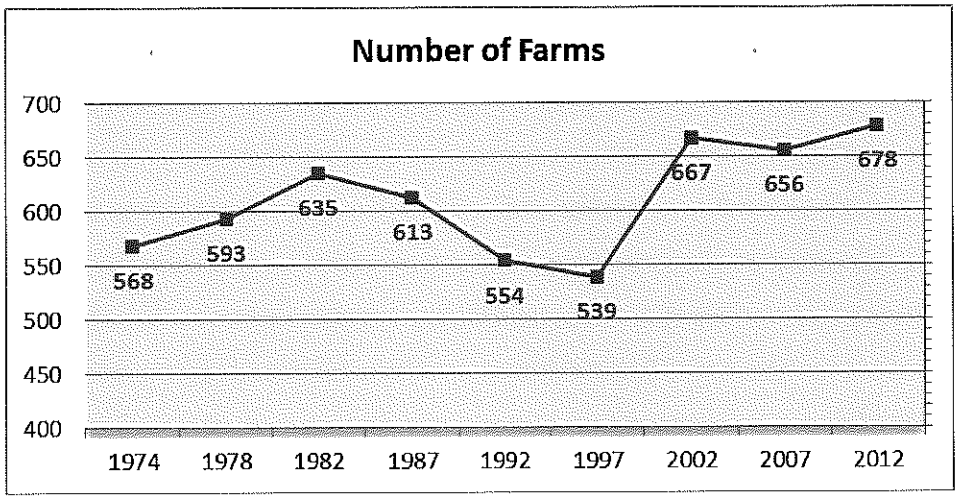
Appendix 2. Profile of the Agricultural Economy in Dutchess County

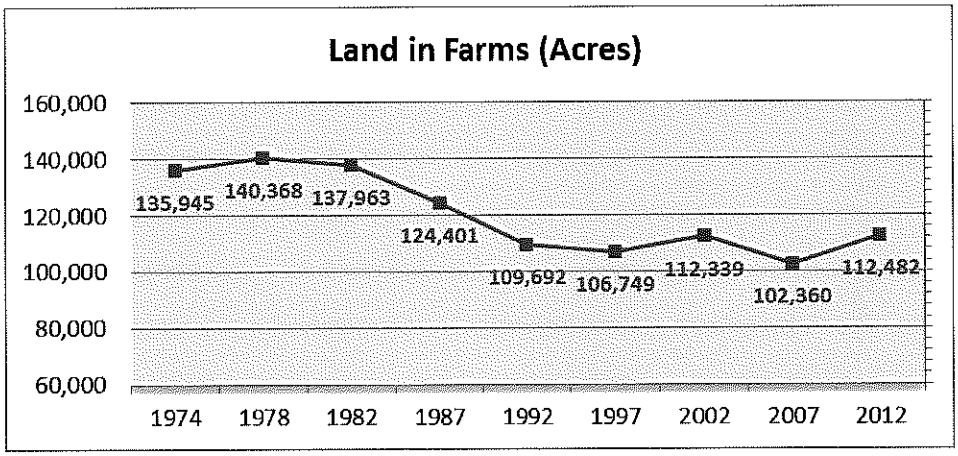
Several sources of data have been used to develop this profile of the agricultural economy. The U.S. Census of Agriculture is a good source of statistical information for understanding and evaluating the agriculture sector countywide and its important economic and other quantitative characteristics, as well as the changes that have occurred overtime. The Census of Agriculture is conducted every five years by the USDA and information is available from 2012, 2007, 2002, 1997 and even further back. Furthermore, it enables the comparison of Dutchess County agriculture with other counties in the Hudson Valley and elsewhere. However, the Census of Agriculture is voluntary on the part of the farmer so it is not always a 100% accounting as some farmers do not participate. This plan also relies on the data collected for every farm as part of the eight-year agricultural district review by the County. This data base is developed and managed by Cornell Cooperative Extension. Finally, data from US County Business Patterns, Cornell University using 2014 IMPLAN data, and the Northeast Milk Market Administrator have also been included. Sources of data are noted below.

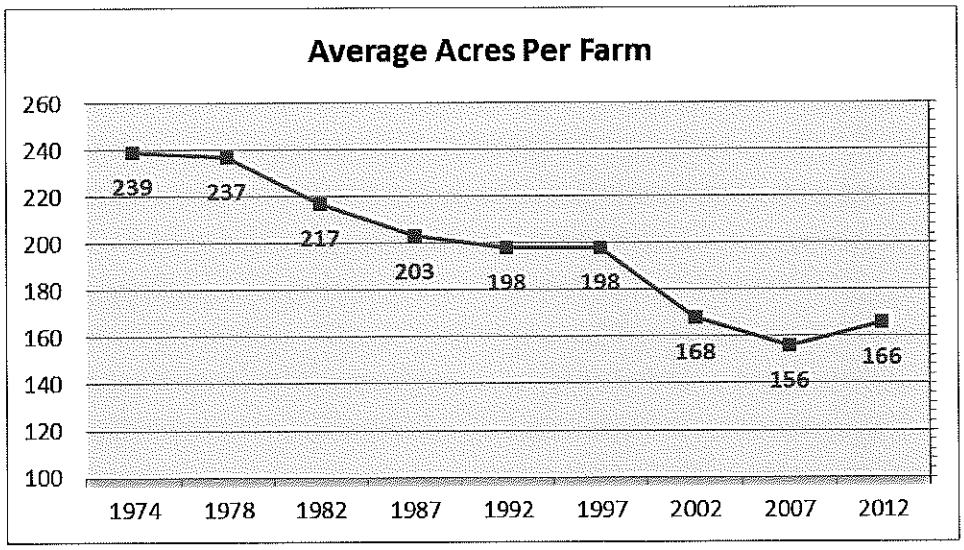
Table 1 - Dutchess County Agriculture Trends

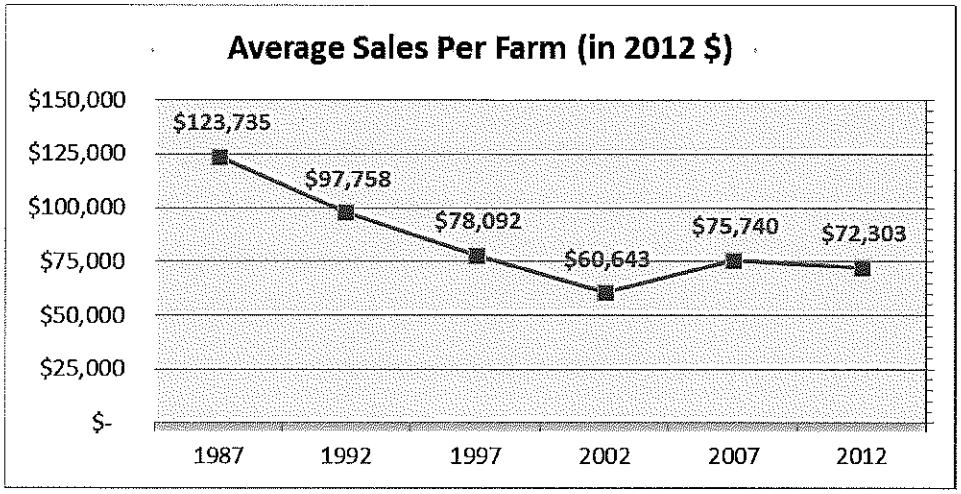
Year	No. of Farms	Total Acres	Av. Per farm	Av. Sales Per Farm*
2012	678	112,000	166	$72,303
2007	656	102,000	156	$75,740
2002	667	112,000	168	$60,643
1997	539	106,000	198	$78,692
1992	554	110,000	198	$97,753
1987	613	124,000	203	$123,758
1974	568	136,000	239	NA

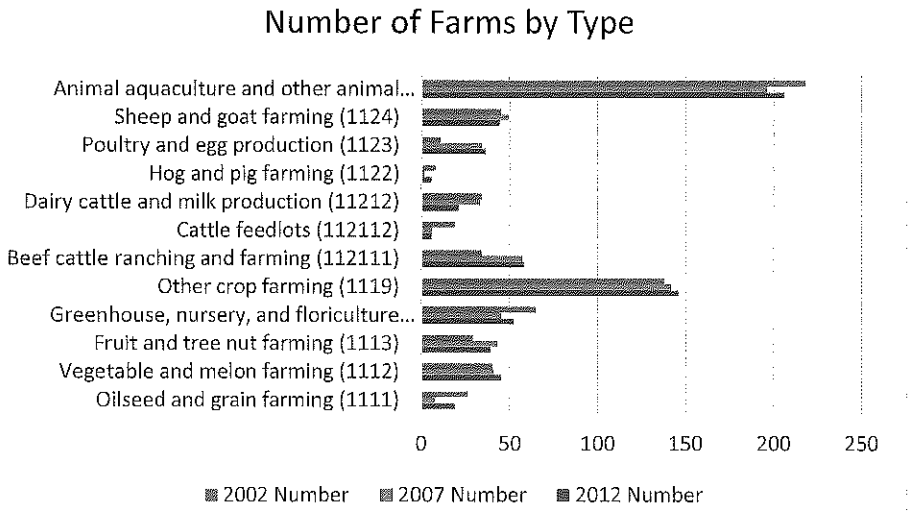
Source: U.S. Census of Agriculture 2012 and earlier years, as tabulated by E. M. Pemrick & Co.
**Inflation Adjusted in Constant 2012 dollars using US CPI.*


Number of Farms
700
650
600
550
500
450
400
568
593
635
613
554
539
667
656
678
1974
1978
1982
1987
1992
1997
2002
2007
2012


Land in Farms (Acres)
160,000
140,000
120,000
100,000
80,000
60,000
135,945
140,368
137,963
124,401
109,692
106,749
112,339
102,360
112,482
1974
1978
1982
1987
1992
1997
2002
2007
2012


Average Acres Per Farm
260
240
220
200
180
160
140
120
100
239
237
217
203
198
198
168
156
166
1974
1978
1982
1987
1992
1997
2002
2007
2012





Important County-wide findings from this data are that:

- The decline in farm acreage due to the County's rapid population growth and development in its peak period, 1970's into turn of century, appears over –at least for now!
- The number of farms are at an all-time high for the period shown, but the average size, while, stabilized is smaller than historical. A large part of this change is due to the decline of dairy farming and the increase in diversified farming – see next section.
- The recent Great Recession may have been a "positive force" for helping to maintain and expand farming since 2007, due to its adverse effects on residential and commercial development, including large second homes projects in the central and northern rural parts of the County.

- Average sales per farm in real dollars has declined dramatically since 1987, but stabilized somewhat in the last Census years and improved since 2002. This change is a function of many factors, including smaller and more diversified farms in the county- to be discussed more.

Market Sales and Agricultural Structure

The Dutchess County agriculture sector has been and is currently quite diversified and has gotten more so in recent years with the decline in dairy farming. The number farms with milk cow operations have declined from 126 in 1987 to 35 in 2012, but still may have significant sales – see below. The historically strong equine farm concentration in the Country continues, and by inventory and sales is the largest by county of such operations in New York State. The diversification of the County's agriculture sector can be seen by the value and distribution of commodities sales, as shown in tables 2, 5, and 6 that follow, and compared to other Hudson Valley counties (see tables 12, 13, and 14).

Slightly more than half the 2012 sales are in the crops sub- sector, with slightly under half now in the livestock and poultry and products subsector, close to historical norms. Growth in aggregate Agricultural sector sales and sub-sector sales since 2002 appears well on the positive side, but as will be discussed later insufficient to offset the cost of doing business for the many farms in the county.

Table 2 - Agricultural Product Sales in Millions of Dollars

Year	Total Sales	Crop Sales*	Crop Sales % of total	Livestock/Poultry**	Livestock/ Poultry % of total
2012	$49.0	$26.0	(53.1)	$23.0	(46.9)
2007	44.9	23.4	(52.1)	21.5	(47.9)
2002	31.7	21.1	(66.7)	10.5	(33.7)
1992	33.1	15.0	(45.3)	18.1	(54.7)

Source: U.S. Census of Agriculture 2012 and earlier years, as tabulated by E. M. Pemrick & Co.
**Includes nursery and greenhouse products*
***And their products*

Table 3 shows data from Cornell University. It shows a slightly higher level of sales (output) from agricultural products at $51 million. But this information also shows that support activities for agriculture and agricultural manufacturing (detailed in Table 4) adds over $100 million in economic output related to farming in the county. With the agricultural multiplier applied (Table 4) that output increases to over $223 million in sales and $119 million in labor.

Table 3 – Number of Jobs and Total Dollar Output of Agriculture in Dutchess County

INDUSTRY	DESCRIPTION	EMPLOYMENT		OUTPUT		LABOR INCOME	
		JOBS	PERCENT	DOLLARS	PERCENT	DOLLARS	PERCENT
0-14	TOTAL AGRICULTURAL PRODUCTION	922	0.6%	$51,274,512	0.2%	$33,969,721	0.4%
19	TOTAL, SUPPORT ACTIVITIES FOR AGRICULTURE AND FORESTRY	199	0.1%	$5,495,846	0.0%	$6,705,262	0.1%
41-73,130-	TOTAL, AGRICULTURAL MANUGAFCTURING	241	0.2%	$99,303,791	0.4%	$11,474,314	0.2%
	ALL AGRICULTURE	1,362	0.9%	$156,074,149	0.7%	$52,149,297	0.7%

Data Source: Minnesota IMPLAN Group, Inc. Table based on methodology developed by Todd M. Schmit, Associate Professor, Dyson School of Applied Economics and Management, Cornell University., Agriculture-Based Economic Development in New York State: The Contribution of Agriculture to the New York Economy, May 2014.

Table 4 shows about 1300 jobs associated with agricultural production, support services, and manufacturing together.

Table 4 – Number of Jobs and Total Dollar Output of Agriculture by Commodity in Dutchess County

Estimated Economic Contribution of Agriculture on the Dutchess County Economy, 2012									
	Direct Contribution			NYS Multiplier Applied			Total Contribution (Direct+Indirect+Induced)		
	Employment	Industry Output ($ millions)	Labor Income ($ millions)	Employment	Industry Output	Labor Income	Employment	Industry Output ($ millions)	Labor Income ($ millions)
AGRICULTURAL PRODUCTION	922	51.27	33.97	1.45	1.61	1.69	1,337	82.55	57.41
AGRICULTURAL SUPPORT SERVICES	199	5.50	6.71	1.12	1.83	1.33	223	10.06	8.92
AGRICULTURAL MANUGAFCTURING	241	99.30	11.47	2.83	1.56	2.99	683	154.91	34.31
ALL AGRICULTURE	1,362	156.07	52.15	1.80	1.43	2.29	2,452	223.19	119.42
% of All Industries in Dutchess County	0.9%	0.7%	0.7%				1.7%	1.0%	1.6%

Data Source: Minnesota IMPLAN Group, Inc., Table based on methodology developed by Todd M. Schmit, Associate Professor, Dyson School of Applied Economics and Management, Cornell University., Agriculture-Based Economic Development in New York State: The Contribution of Agriculture to the New York Economy, May 2014

Currently, based upon 2012 Census detailed commodities sales where published, table 5 shows the product category rankings in the County by total sales:

Table 5 - 2012 Dutchess County Product Rankings

Product	Sales ($millions)	Share of total Agricultural Sales (Percent)
Dairy	$9.9	19.5%
Horses /ponies/other equines	$9.2	18.8%
Grains/oil seed/dry beans/peas	8.4	17.1
Hay and other crops	5.3	10.8
Greenhouses,/nurseries/floriculture	5.1	10.4
Vegetable/ melons/potatoes	3.7	7.5
Fruits/tree nuts/berries	3.4	6.9
Sheep/goats & their products	1.1	2.2
Other animals and their products*	.7	1.5
Poultry and eggs	.4	0.8
Cut Christmas trees	.2	0.4
All other products*	11.51.6	23.54.1%
Total Sales	$49.0	100.0

Source: U.S. Census of Agriculture 2012 and earlier years, as tabulated by E. M. Pemrick & Co.
** Sales information not published for cattle/caves, milk/dairy products from cows, hogs/pigs and aquaculture, which total to All Other Products.*

The absence of sales information in the Census of Agriculture for 2012 for milk and dairy products from cows is unexpected, given that in 2007 and 2002 sales levels were significant - $9.0 million and 6.6 million, respectively. The number of dairy farms in the county only fell by 3 from 2007- 2012 and the average number of cows per farm dropped only from 65 to 63. It is likely that information is not disclosed because a very high concentration of sales are in very few farms with very large herds.

However, we know from data from the Northeast Milk Marketing Administrator, that there were 22 dairy farms in 2013, selling 45,323,000 pounds of milk for a total estimated value of $9,467,975. This data is the most accurate data that can be collected as all farms selling milk are accounted for. The Census of Agriculture lists 35 farms having dairy cows. Some of those farms may use their milk for cheese or other products.

The patterns of growth by product category over the past 10 years show big gains for a few and losses for some categories, including vegetables, melons and potatoes (Agricultural Census 2012). The cause of these sales patterns are complex, and may be a function of weather factors interacting with and a supply/ demand forces affecting supply quantities and unit prices.

The County has many small farms where annual sales of agriculture products are less than $10,000. Table 6 shows the 2012 distribution of sales in the County by sales size class of farms.

Table 6 - 2012 Dutchess County Agricultural Product Sales by Size Class

Farm Size	Number of Farms	Percent of Farms
Less than $1,000	171	25.2%
$1,000 - $9,999	174	25.6%
Total under $10G	**345**	**50.8%**
$10,000 -$49,999	161	23.7%
$50,000- $99.999	59	8.7%
Total under $100G	**565**	**83.3%**
$100,000- $249,999	66	9.7%
Over $250,000	47	6.9%
Total	678	100.0%

Source: U.S. Census of Agriculture 2012 and earlier years, as tabulated by E. M. Pemrick & Co.

The 2012 Census data further indicates that 18 farms, 2.7 percent of all farms, with sales of $500,000 and over account for 42 percent of all agriculture product sales in the County.

With 50 percent of the farms in the County having sales of under $10,000 it may be that these farms are just starting, or part-time endeavors. The Census data indicates that in 2012 fully 46 percent of farms had operators who had off farm primary jobs. This was up from 42 percent in 2002. The challenge for agricultural economic and sustainability policy is to determine how might some of these small farms increase their production and market sales, if the operators are so willing

The large number of small farms in the county with minimal sales, and operators with other primary jobs, plus the concentration of sales among a few number of profitable larger ones, makes a county-wide agricultural sector business development strategy more complex. This Plan and its attendant programs must recognize the underlying agricultural structure, sales distribution and other attributes. The issue of whether farms with limited sales can and want to participate (successfully) in organized and focused business growth and development initiatives should be considered. Alternatively, it is necessary to evaluate the extent that farms with large sales and profitability will accept the value of participating with an organized County-wide effort to promote and expand the agriculture sector.

Sources of Market Sales

Knowing the dollar value of market sales by product category, as was illustrated above, does not identify the destination markets to specific intermediate processors and wholesalers, as well directly to retail and other commercial entities, as well as direct to households.

Only scant information is found in the Agricultural Census on market destinations. It indicates for example that farmers in Dutchess County are selling a greater proportion of their products directly to consumers, via farm stands, farmers markets and other venues. The growth has been significant:

Table 7 - Dutchess County Agricultural Sales- $millions

Year	Total ($millions)	To Individuals	% to individuals
2012	$49.0	$5.7	11.6
2007	44.9	2.8	6.2
2002	31.7	2.3	7.2
1997	36.1	1.6	0.4

Source: U.S. Census of Agriculture 2012 and earlier years, as tabulated by E. M. Pemrick & Co.

In the 2012 Census additional destination information was provided on certain farm practices- not by sales value, but only by the number of Duchess County farms participating, as follows:

Table 8 - Sources of Farm Income Other Than Product Sales

Marketing Practice	Number	% of all farms
Marketed products directly to retail outlets	72	10.6%
Used Community supported entities	10	1.5%
Produce/Sold Value added products	66	9.7%
On farm packing facility	19	2.8%

Source: U.S. Census of Agriculture 2012 and earlier years, as tabulated by E. M. Pemrick & Co.

Additional information and analysis on market destination opportunities and farm practices that return higher profit margins are critical elements in helping the County agricultural sector grow and prosper.

Farm Production Expenses and Income

The Census of Agriculture does not provide production costs or income data by type of farm product class, or size at the county level. With the very different production functions among the diverse subsectors of farming in the county, it is difficult to assess how key market forces interacted with operational costs to impact the "bottom line."

The information from the last two Censuses shows in the aggregate a net loss in farm cash income, – $17.2 million in 2012 and -$5.8 million in 2007. However, for both years there were "winners and losers." In 2012 there were 233 farms with net average gains of $48,317 and 445 farms with net average losses of -$63,847 (see New York State, Census of Agriculture 2012, table 4, page 269). Unfortunately, not published are the characteristics with respect to products types, acreage size or sales amounts, or other aspects. We do know that the County has many small farms, as measured by product sales, over 50 percent below $10,000 in sales. This concentration is very likely the major underlying negative with respect to overall county-wide farm profitability.

In 2012 gross income from other than product sales accounted for about 27 percent of all income, up from about 17 percent in 2007. Agricultural tourism and recreation services, a very small share of 'other income', did have large relative increase, with still only a handful of farms participating.

Table 9, shows a breakdown of production expenses for all farms in Dutchess County. The information indicates which categories rank highest, but does not provide any capability to assess cost effectiveness of farm operations in the county among farm types, sizes or between sectors or with farms in other counties.

The Census farm production cost and income information cannot be used directly to assess the specific public policy and private business initiatives and programs most necessary to improve the economic outlook for farming in Dutchess County. If the Census of Agriculture is reasonably accurate, from the traditional business model context, the overall agriculture sector is not in economic terms "healthy." However, the traditional business model is not necessarily the only yardstick to measure the economic, land use, and environmental and quality of life contributions of the agricultural sector to Dutchess County.

One of the issues raised over the years by farmers is the amount of tax they pay. Table 9 shows that farms paid about 6.8 million in property taxes, or about 8.6% of farm expenses. The tax burden is likely to affect the smaller and less profitable farms the most.

Table 9 - Dutchess County All Farms Production Expenses -2012

Production Expense	$Millions	Percent
Agricultural chemicals & fertilizer	$4.2	5.3%
Electricity & petrol. production	7.5	9.5
Feed	10.3	13.0
Labor –hired & contract	22.3	28.0
Livestock and poultry	1.2	1.5
Seed, bulbs, plants & trees	1.7	2.1
Supplies repair & maintenance	7.5	9.5
Property taxes	6.8	8.6
Selected expenses*	6.4	8.1
All other**	11.4	14.3
Total	$79.3	100.0%

Source: 2012 Census of Agriculture, NYS Report.

**Covers custom work and hauling, cash rent for land, buildings and grazing fees, rent & lease expense for machinery, equipment & vehicles and interest expense. These items are reported separately in the Census.*
*** Includes animal health costs, storage & warehousing, marketing & ginning expenses, and insurance.*

Characteristics of Farm Operators and Labor

As in other locations, the average age of farm operators in Dutchess County is increasing. In 2012 the average age of the 678 farm principal operators increased substantially to 58.8; with 63% over 55 years, 24% between 45-54 years, and only 13% under 44 years. An aging farm operator population is occurring throughout New York State. These figures exemplify the need to attract new, and younger farmers into the business sector.

Total farm operators, including principal ones, number 1,110 in the County and women account for 1/3 of principal operators and 36% of all operators. There were 339 farms in the county, who reported 712 (family) persons as unpaid workers.

Farm income alone cannot support many farmers and their families. In 2012 about 46 percent of all principal operators, higher than other Hudson Valley counties, have primary off farm occupations. In 2002 this percentage was 42 %.

Tenure, Acreage and legal Status

Understanding the demographics, tenure and the legal characteristics of the farm community in the County is essential to developing effective public and private initiatives to strengthen the agricultural base of the County and increase current low farm net incomes.

In 2012 70 percent of all farms in the County have only one owner, 23% have more than one owner and 7%, 45 farms, are tenant operated

Table 10 - 2012 US Census of Agriculture reported legal status for tax purposes for Duchess county farms

Business legal status	No. of farms	Average size (acres)
Family/or individual	446	130
Partnership	91	287
Corporation, family held	94	160
Corporation, other	29	208
Co-ops, estates/trusts, or institutional	18	39

Hired Labor

The 2012 Census reported 1,414 hired farm workers on 228 (48%) of all county farms. But only 129 reported 326 workers working more than 150 days per year. Farm payroll was $214 million and the average annual wage was $15,119, somewhat more of those working more than 150 days, which was $21,120. About 50 percent of all farm laborers worked 150 days, or more. Most farms with workers, 73%, employed less than 5 workers, 17% between 5-9 workers, and 10% 10 or more workers,

According to the Census, reported migrant worker are not a significant labor force element for Dutchess County farms. In 2012 only 15 farms reported 54 migrant workers, while Ulster County

reported 740 and Orange County 471 migrant workers. The size of crop farms is the key determinant in the need for and use of migrant labor (see next section).

The Census data by itself does not provide information on work force issues facing county farmers, but having sufficient and reliable farm workers is essential for many farm operations.

Market Value Agricultural Land

The market value of agricultural lands, buildings and equipment are substantial. In 2012, the value of land and buildings was over $583 million, up from $512 million in 2002 (a 1.8% increase). The percent change in value was much greater between 2002 and 2007 (12%). Market value of machinery increased almost 14% in those years from $30 million to $66 million.

The average market value of land and buildings per farm decreased however between 2007 and 2012, as did the average value per acre.

Table 11 – Dutchess County Market Value of Land, Buildings and Equipment on Farms 2002 to 2012.

				% Change	
	2012	2007	2002	2007-12	2002-07
Market Value of Land & Buildings: Total	$583,419,000	$573,270,000	$512,129,000	1.80%	11.90%
Average Per Farm	$860,499	$873,887	$766,660	-1.50%	14.00%
Average Per Acre	$5,187	$5,601	$6,291	-7.40%	-11.00%
Market Value of Machinery & Equipment: Total	$66,228,000	$58,294,000	$30,040,000	13.60%	94.10%
Average Per Farm	$97,681	$88,862	$58,787	9.90%	51.20%

Source: 2012 Census of Agriculture, NYS Report.

Comparing Agriculture in Dutchess County with other Hudson Valley Counties

In comparing historical trends for Dutchess County with several other adjacent and nearby counties of Columbia, Orange, Sullivan and Ulster we find many similarities. Some key 2012 characteristics for the five counties are found in tables 12, 13, and 14.

Table 12 - Agriculture Product Sales - 2012

County	Total Agricultural Sales ($ million)	Average Sales/farm	Crops (%)*	Livestock/Poultry (%)**	Largest Sales Categories
Dutchess	49.0	72,303	53.1	46.9	horses/ponies & grains
Columbia	66.5	134,663	54.0	46.0	Dairy
Orange	100.7	153,035	71.5	28.5	vegetables and nurseries
Sullivan	27.1	84,424	15.0	85.0	poultry/eggs, milk & prod
Ulster	55.9	115,019	83.0	17.0	fruit & vegetables

Source: U.S. Census of Agriculture 2012 and earlier years, as tabulated by E. M. Pemrick & Co.
**Includes nurseries and greenhouses*
***And their products*

The four counties are quite different in their sales characteristics with respect to aggregate amounts, averages per farm and distribution among commodity/product types. While Dutchess is the most diversified, it also has the lowest average sale per farm.

A telling economic indicator is that Dutchess County agriculture in 2012 in the aggregate suffered from an overall loss in farm profitability, the only one of the four counties, as shown below. Even those farms in the county with profitability have a lower net gain than those in the other counties, while farms with net losses in Dutchess had far greater net losses.

Table 13 - Comparative Profitability Agriculture Sector Profitability -2012

County	2012 Profitability* ($millions)	Net Gain Per farm **	Net Loss Per farm ***
Dutchess	-$17.2	$48,317	- $68,847
Columbia	$8.7	122,509	45,737
Orange	$13.0	106,520	- 44,015
Sullivan	$2.7	88,183	-29,953
Ulster	$6.6	105,036	-30,402

Source: U.S. Census of Agriculture 2012 and earlier years, as tabulated by E. M. Pemrick & Co.
**As measured by cash farm income **For farms with net cash gain*
**** For farms with net cash loss*

It is possible that Dutchess County farms did not show in the aggregate a profit for 2012 due to a combination of having proportionately more small farms with owner/operators having non farming primary occupations combined with relatively high non-farm incomes. This would allow them to run losses from their farm operations. Table 14 includes 2012 Census data that shows the proportion of farms having non-primary farm occupations by county. Of the four counties that were compared, Dutchess County has the highest percent of farms with operators whose farm is not their primary occupation. This data correlates to other data showing many small farms (in acreage as well as income) in Dutchess County. It is important to note however, that many such farms turn into larger operations over time. Further, an aggregate of small farms still contributes to the overall health and economy in the County.

Table 14 - Farms with non-primary farm occupations

County	Farms with non-primary farm occupations
Dutchess	45.7%
Columbia	38.5%
Orange	39.4%
Sullivan	40.5%
Ulster	32.7%

Source: U.S. Census of Agriculture 2012 and earlier years, as tabulated by E. M. Pemrick & Co.

Agriculture and the Chain Link to the Overall County Economy

Table 15 places in context the farm sector in Dutchess County with other vertically linked economic sectors associated with product chain originating "on the farm." This does not necessarily mean that sales of in-county farms are destined to in-county entities. Agriculture products flow across county, state and national borders.

Within the overall Dutchess County economy, farms and up-the-supply-chain economic entities represent a very small proportion of the County's total all-sectors employment and aggregate wages. Wages in these sectors are lower than the County average for all sectors. However, beyond standard economic measurements, a sustainable agriculture sector provides open space amenities and other quality of life benefits that contribute to Dutchess County being an attractive place to live and work.

Table 15 - Establishments, Employment, and Wages in Dutchess County -2012

	No. of Establishments	Employment	Annual Wages ($millions)	Average Wages
Agriculture Sector*	(farms) 678	1,114	$21.4	$15,119
Other Farm Products Sectors – subtotal**	142	1,434	43.0	$29,986
Total	820	2,548	64.4	$25,111
% of all Economic Sectors	10.1%	2.3%	1.2%	50.8%
All Sectors**	8,056	109,760	5,425.8	$49,433

*Sources: *2012 Census of Agriculture, NY State Report.*
*** Annualized data from Quarterly Census of Employment and Wages, NYS Department of Labor. Other farm product sectors include, with NAICS Codes: Support activities for animal production (1152); Food manufacturing (311); Grocery & related product wholesalers (4244): Nursery, garden centers & farm supply stores (44422); Specialty food stores (4452) and an estimated 15 percent of veterinary (54194) establishments and employment.*

The following tables include additional Dutchess County data from the US Census of Agriculture:

Dutchess County Average acres per farm					
2012	2007	2002	1997	1992	1987
166	156	168	198	198	203

Dutchess County Farms by Size, 2012		
Acreage	Number	Percent
1-9	85	12.5%
10-49	217	32.0%
50-179	218	32.2%
180-499	109	16.1%
500-999	35	5.2%
1,000 or more	14	2.1%
Total	**678**	**100.0%**

Dutchess County Farms by Value of Sales (Summary), 2007		
	Number	%
Less than $10,000	*346*	*52.7%*
$10,000 to $99,999	*210*	*32.0%*
$100,000 or More	*100*	*15.2%*
Total	**656**	**100.0%**
Change, 2007-12		
Less than $10,000	*-0.3%*	
$10,000 to $99,999	*4.8%*	
$100,000 or More	*13.0%*	
Total	**3.4%**	

Dutchess County Selected Practices, 2012							
Marketed products directly to retail outlets		Produced/sold value-added commodities		Marketed products thru community-supported agriculture		On-farm packing facility	
# farms	**%**	**# farms**	**%**	**# farms**	**%**	**# farms**	**%**
72	10.6%	66	9.7%	10	1.5%	19	2.8%

Dutchess County Farms by Value of Sales, 2012		
	Number	%
Less than $1,000	171	25.2%
$1,000 to $2,499	62	9.1%
$2,500 to $4,999	41	6.0%
$5,000 to $9,999	71	10.5%
$10,000 to $19,999	73	10.8%
$20,000 to $24,999	23	3.4%
$25,000 to $39,999	45	6.6%
$40,000 to $49,999	20	2.9%
$50,000 to $99,999	59	8.7%
$100,000 to $249,999	66	9.7%
$250,000 to $499,999	29	4.3%
$500,000 or More	18	2.7%
Total	**678**	**100.0%**
Less than $10,000	*345*	*50.9%*
$10,000 to $99,999	*220*	*32.4%*
$100,000 or More	*113*	*16.7%*

Dutchess County Farms by Commodity, 2012		
Farms with...	Number	%
Cattles and calves	160	23.6%
Beef cows	102	15.0%
Milk cows	35	5.2%
Hogs and pigs	33	4.9%
Sheep and lambs	77	11.4%
Note: numbers add up to more than the total because some farms sell more than one commodity		

Dutchess County Farms with Sales of Less than $500,000/Year						
# of Farms	Total Sales	Average Per Farm	# of Farms	% of Farms	Total Sales	% of Sales
678	$49,022,000	$72,303	660	97%	$28,189,000	58%

Dutchess County Cropland (acres)						
2012	2007	2002	1997	1992	1987	% net change, 1987-2012
45,576	46,938	59,255	62,898	59,901	69,907	-34.8%

Dutchess County Harvested cropland (acres)						
2012	2007	2002	1997	1992	1987	% net change, 1987-2012
38,941	37,961	43,528	41,212	40,775	46,676	-16.6%

Dutchess County Average sales per farm (NOT inflation-adjusted)						
2012	2007	2002	1997	1992	1987	% net change, 1987-2012
$72,303	$68,393	$47,544	$54,586	$59,730	$61,249	18.0%
Dutchess County Average sales per farm in constant 2012 dollars						
$72,303	$75,740	$60,643	$78,092	$97,758	$123,735	-41.6%

Dutchess County Agricultural products sold directly to individuals in constant 2012 ($)			
2007	2002	1997	% change, 1997-2012
$ 3,073,090	$2,947,704	$ 2,233,190	153.4%

Dutchess County Number of dairy farms (i.e., farms with milk cows)						
2012	2007	2002	1997	1992	1987	% net change, 1987-2012
35	38	45	64	81	126	-72.2%

Average milk cows per dairy farm							
	2012	2007	2002	1997	1992	1987	% net change, 1987-2012
Dutchess County	63	65	64	65	57	61	3.3%
NYS avg	113	110	91	80	67	59	91.5%

Appendix 3. Outline of the Planning process

The planning process was organized by the Dutchess County Agricultural and Farmland Protection Board (AFPB) with coordination by the Dutchess County Department of Planning and Development. Work began with the formation of a steering committee composed of AFPB members, farmers, staff from County Planning, Cornell Cooperative Extension, NY Farm Bureau, County Soil and Water Conservation District, and Dutchess Land Conservancy. This steering committee then hired a team of planning consultants to assist in developing the plan.

This Plan was prepared with extensive input from farmers, government agencies, not-for-profit organizations, and the general public. Input was received through meetings of the steering committee and the AFPB, a farm operator's survey, a general public survey, a municipal official's survey, and interviews with several other stakeholders. From these activities the steering committee identified agricultural issues, strengths, weaknesses, and opportunities in Dutchess County. Farmer input was critical to the development of the initial vision and subsequent goals and recommendations.

The planning process began with the formation of the steering committee in August 2013, and continued with the following steps taken over a 14 month period:

- September 2013 - The steering committee began working with consultants on the plan, with monthly meetings to communicate progress and share information.
- October 2014 - The county set up a project website to help promote the plan, and to share information with farmers and the general public. Cornell Cooperative Extension Dutchess County also used their existing Facebook account as a promotional tool, advertising events and updates on the plan's progress.
- November 2013, continuing into January 2014 - Developed 3 online surveys targeted to different audiences: Farm producers, municipal officials, and the general public were asked to identify farm related issues and needs, and to describe their vision for the future of agriculture in the county.
- December 12, 2013 - Facilitated a well-attended stakeholder input meeting with farmers, agriculture related businesses, government officials, and some members of the public. The committee gained valuable input on the issues facing agriculture in Dutchess County, and from that, developed a vision for the future of farming in the county.
- January 2014 - The Steering Committee and consultants conducted several phone interviews with selected additional stakeholders.
- February 2014 - Geographic data and maps were collected and analyzed in order to document current conditions and characteristics of farms and farmland in the County.
- February 2014, continuing into March and June - Developed a description and map of priority farmland areas. Used a modified Land Evaluation and Site Assessment model (LESA) to evaluate criteria that could affect farming and its viability. (See Priority Agriculture Area section and Appendix 6)
- February 2014 - Tour of county farm operations with the consultants and a sub-group of the steering committee.
- February through March 2014 - Information learned from the public input and collected data was used to identify the county's agricultural strengths, weaknesses, opportunities, and threats (See SWOT Section).
- April 2014 - A long-term vision and a set of goals were established.

- May through June 2014 - Specific strategies were identified to help the County meet its long-term goals.
- July through September 2014 - Assembled sections of the plan and developed a full draft plan for the committees review that meets the statutory requirements of Section 324-a of Article 25 AAA of the New York State Agriculture and Markets Law, along with Circular 1500.
- October 29, 2014 - The Steering Committee conducted a Public Hearing to present the plan and hear comments from the public and farmers.
- January 2015 - The Draft Plan was delivered to the Dutchess County Legislature for their consideration and adoption.
- Pending - Plan submitted to NYS Department of Agriculture and Markets for their consideration and approval.

Appendix 4. Farmer and Public Input

Kick Off Meeting

In December 2013, a public meeting was held to solicit input from residents, landowners and farmers. The meeting concentrated on identifying strengths, weaknesses, opportunities and threats that participants felt were affecting agriculture in the County. The following is an organized summary of the comments made. This information was invaluable in forming the full Strength, Weakness, Opportunity, and Threats (SWOT) analysis for this Plan.

What are the issues facing agriculture in Dutchess County?

- Taxes: High taxes, local, county and state. Property taxes in NYS and Dutchess County. Taxes.
- Agricultural Assessments: Agricultural Assessments are increasing over time. Even though there is a cap now, they will still go up. Assessments on structures are based on the replacement value and this makes assessments and thus taxes much higher. Agricultural assessment system is not small-farm friendly
- Regulations: EPA and state environmental laws are restrictive. Concern over rules and regulations. 1) Small agricultural operations have barriers because the rules are the same for large and small operations. That is not fair, nor sustainable. Small farms can't cover the costs. Licensing for slaughterhouses – same fees for small operations as large ones and that is not fair. 2) State laws for selling raw milk are restrictive. Unduly restrictive regulations (local). Milan zoning – need an area variance for a farm fence. Small farms – regulations are time consuming and need to be scaled and commodity specific. They are daunting for the younger generation.
- High Cost of Farming in Dutchess: The area is difficult to do farming in due to high land rental prices, high land purchase price, high cost of agricultural services, etc. Farmers have to go out of town to get farm services – it is hard to access services here. It is hard for young people without a family farm to enter farming. No young farmers are able to come back here to farm. Land prices for farmland are too high. Support businesses are needed High cost of land makes it hard for young farmers to acquire land.
- Lack of Education and Awareness about Agriculture: Nobody helps educate people about or promote the use of land for direct sale operations. County cut 4-H and Ag in the Classroom – now there is little ag-related education. Awareness of agriculture in Dutchess County. Public is not familiar with farm operations. Public education needed– on Farm-to-Fork, GMO vs. conventional, what do slaughterhouses really do to the area. Young farmers need mentoring, education, training, land and ongoing capital. There is need for non-farm landowner training Lack of education of landlords about farming. Need to get info to land owners. There is a cultural shift when land has gone from farmer to non-farmer. Fewer farmers to mentor young farmers. Need to make connections. Misunderstanding about pesticides – need to educate.
- Lack of Transportation: There is need of better transportation to take advantage of direct sales as there is no good access to New York City.
- Lack of Processing and Slaughterhouses: Lack of slaughterhouse prevents agriculture from expanding. Processing of animals, nothing close or accessible, too much travel time. Worse if doing poultry and sheep.
- Labor issues: Difficult to find labor. Labor, farmers, and housing – fewer people to lease land to. Finding good help – immigration laws

- Lack of Communication: the internet is fragmenting people as there is to much information and fragmented. It has caused less social interaction. This is related to the shrinking of CCE. People don't know what is going on, and it is less clear now. Disorganization – too many things going on to coordinate, e. g. research and education, distribution capacity. Need an organization where Agricultural can "interact". Communication – need better non-farmer landowner/farmer relationships. We are diverse but factions – need agricultural summit to bring together and make more connections.
- Difficult Access to Grant Funding: It is hard to find, access, or know what to do to get grant monies. There is no central clearinghouse of that information. It is hard to access USDA funding and does not believe that USDA is honest around here.
- Lack of access to land: County hasn't done enough to protect farmland. There needs to be limits as to who can purchase farmland. IE, farmers should get to buy the farmland, rather than non-farmers. Would like to lease property for vineyard, but long term investment is too much. Long term access to land, need some kind of lease structure. Despite proliferation of small farms/niche farms – big opportunities to effectively preserve farm acreage. Availability of land to younger farmers is an issue. There are startup hurdles such as capital. Need larger scale production to keep large farm acreage open for profitable farming.
- Animal welfare rights – they use subversive techniques and are out to get animal agriculture.
- Technology – it is used unevenly – is everyone keeping up with it? Can everyone access it?
- There are no longer any grain mills around in the county.
- Municipal attitudes are not always good. In Amenia, there are no farmers on the Planning Board or Town Board and they don't really want farmers to participate.
- Utility line expansion is impacting the farm community. This should be addressed regionally.
- All resources related to grapes are oriented toward Finger Lakes. However, there is much need in the Hudson Valley and there is minimal grape assistance offered here. Cornell gives too much emphasis to the Finger Lakes region. The region is 500 tons short of grapes, need more production.
- Signage regulations are not farm friendly – cannot be more than 5 miles away
- Marketing – need shorter distribution distances between the producer and the consumer, fewer hands in between
- Additional transition strategies
- Need new and expanded funding tools, not enough money to cover current needs
- Creative outlets in education to expand markets
- What is agriculture and where do horses fit in? Handling the transformation from dairy to horse farm
- Needs agricultural economic development – tourism is critical. Capital investments needed – people will spend in the area if possible.

What do you hope agriculture will be like in the County in the next 10 to 15 years?

- Vibrant, diversified agriculture throughout the county with food going into local markets where they are priced competitively to keep California and international food out. 75% of all product is used within 25 miles, all else is exported
- Doubling of Agricultural production value in Dutchess County – a goal
- Doubling of public support, also
- We have methane digesters and municipal waste used to generate power.

- County agency exists to educate farmers to take advantage of NYC markets and more people have operations oriented to farm to table/direct markets.
- There is an educated labor force available.
- Schools have educational programs related to agriculture.
- People are educated as to why homes in the middle of field are bad
- More farms are under cover with hoop houses and have extended their growing seasons.
- Grants exist and farmers have a simple way to access and apply for them.
- Local people can afford to buy local products.
- We realize that the cheap food policy of the United States is not wise and we have a new policy that allows people to buy locally, where people understand the food system and costs, and where farmers receive a fair price for their product.
- No farm goes out of business because they get adequate prices for their product.
- There is a cooperative solar energy project on a regional basis.
- Where we can drive down the road and see crops and not abandoned fields and houses.
- We have feed delivered by drones (message being that new technologies are used)
- Towns will include agriculture in their comprehensive plans and this inclusion recognizes that agriculture is changing and they change their policies to support it.
- There is no stigma for those who are employed as farm laborers.
- Kids are interested in and educated about agriculture and there is an introduction to agriculture class that is mandatory in local schools.
- Permanent preservation of the best soil types for future agriculture
- More land placed into conservancy
- Permanently preserved farmland
- Uniform branding of Dutchess County products
- Continued family farms
- Young people, families are farming. Young farmers are able to make a living and it is economically viable.
- Tax formula changed, farmland taxes less, including the house
- Distribution hubs that connect farms and users
- Farm friendly zoning in all towns
- Federal and local regulations that actually assist smaller on-farm slaughter of animals
- More food hubs, with refrigeration, low-cost distribution
- Red-meat – need a permanently placed facility. Mobile doesn't work for red meat
- Better connection between what's being produced and those living here – heating with biomass, more value added products
- Opportunities are here, but unrealized. It's a "honey-hole" compared to western part of NYS
- Less government control
- Legalized signage connecting farms and places that use local agriculture products
- Next census will show more young farmers
- Good farmers = professionals
- Land is available here
- Change negative attitudes such as 'can't make a decent living' –it is a businesses, not just lifestyle and you can make a living.

What opportunities, projects or programs do you think the County should undertake to help sustain agriculture?

- Work to create different rules for small operations.
- Develop a program so farmers have an option to purchase land at its agricultural value (similar to a program from Vermont).
- Zoning regulations – as in Kentucky, 40 acre lots cannot be subdivided
- Have a SCORE program for ag.
- Create easier laws on raw milk and allow to be sold off farm.
- Promote use of methane digesters.
- Promote more breweries and distillery
- Take advantage of NYC markets
- Use vans to transport produce to NYC on Taconic Parkway
- Work with local governments to change zoning to allow for more than one business on a farm.
- Create a solar energy cooperative
- Start education programs for farm labor
- Start education program for agricultural literacy for students.
- Have a person to help with and a mechanism for a central clearing house for ag-related grants. The county agencies should get together and have a coordinated grant writer.
- Require supermarkets to buy a certain percentage of their produce locally. And convince community that is what they want.
- Require schools to buy local.
- Food hubs
- Virtual food hub – a way for farmers to share excess product or capacity with other farmers – online
- Private enterprise food hubs, with capital supplied by private businesses
- Counties first goal should be to retain and enhance businesses already here. There is more need to have agriculture as an emphasis in the economic development programs in the county. There needs to be recognition and incentives and programs must shift focus from creating only jobs.
- Get together as a region and have coordination among the counties. Have a summit together to discuss commonalities.
- Connect the public with the farmer
- Connect the farmer with other farmers
- Young farmers – 4-H continued, FFA in more than 2 schools, State University in the area with an Agricultural program
- Have a county-sponsored training center for horses. Have barns to rent out for this purpose – possibly at the fairgrounds. Nobody else has a training center like this and it could be a big benefit to agriculture.
- Tax relief for young farmers
- Distribution
- Highland Labs not funded (grapes)
- Evaluate metrics of the value of agriculture – measure it, data analysis
- County – continued public funding for agriculture preservation
- Agri-Business "Empire Zone"
- Employment process is onerous – State could simplify
- A reality show called "Farm Swap"
- Television commercials, campaign at state level
- Constrain property taxes at all levels, farm value assessment

- Local farm zoning
- To bring in young farmers – CLC – match beginning farmers with willing land owners
- Gathering information – Sharing of what excesses you have (products, capacity, equipment)
- DLC – land/farmer program
- Start with students – consciousness of choices, local sources of food.
- FFA – expand to BOCES
- Tap into region's brain power
- Start a program to rent large equipment to small operators. Coordinated by SWCD.
- Reach out to county and state leadership – take advantage of representation
- Have regional reconciliation of various agricultural plans.

Survey Results

The Steering Committee developed three surveys in an effort to gain input for the plan. The groups targeted were - farm operators, municipal officials, and the general public. Notices were distributed to partner agency contact lists, land conservancies, farm organizations, businesses, local news outlets, radio, the CCEDC Facebook page, and at public gatherings. Participants were able to complete the surveys online, or via hard copies distributed through the planning department.

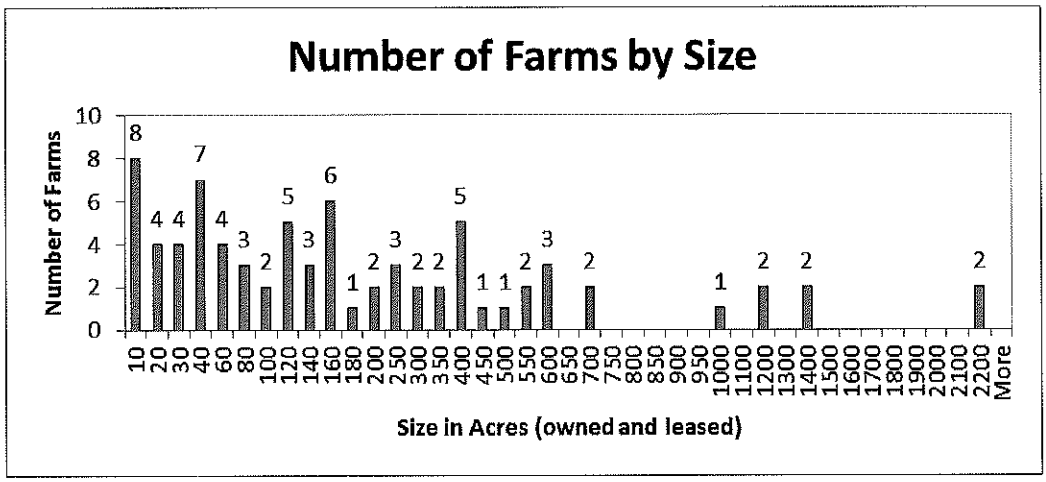
Overall, there was a positive tone to the responses from all three groups. Farmers generally stated they intend to continue farming into the future. A shortage of labor and lack of processing facilities were two needs often cited in the farmers' responses, as well as a glut of farmers' markets. Public responses indicated a strong interest in locally grown products and farmers' markets, as well as support for public expenditures to secure the future of agriculture in Dutchess County.

Summaries of the results of all three surveys follow:

Farm Operators Survey

Summary - 77 responses

- A good cross section of farm sizes, although there are obviously smaller farms, many less than 40 acres of owned land.



- Responses were received from all towns except Poughkeepsie and Fishkill
- Highest responses were: 13 in Washington (2 of those in the village of Millbrook), 12 in Red Hook (1 of those in the village of Tivoli), 11 in Amenia, 9 in Stanford, and 8 in North East (3 of those in the village of Millerton).
- A broad range of years in farming.
- Average – 29 years, with 33% responding 10 years or less. 30% between 10 and 25 years, and 37% from 25 to multiple generations.
- Total acreage represented: 21,533 acres (owned and rented)
- Average farm size represented: 308 acres (also owned and rented)
- Types of farms represented: Hay – 30, Sheep – 27, Vegetables – 26, Cash crops, Chickens – 21 each, Horses – 20
- About half had some kind of secondary value-added or agri-tourism use
- More than half (53%) get less than 25% of income from their farm
- Most sell direct to consumer, with farmers' markets and on-farm stores being the most popular. But, most do not use the NYC markets.
- A large majority are enrolled in an Agricultural District (85%) or use Agricultural Value Assessment (74%). However, 7 respondents (9%) do not take advantage of either program.

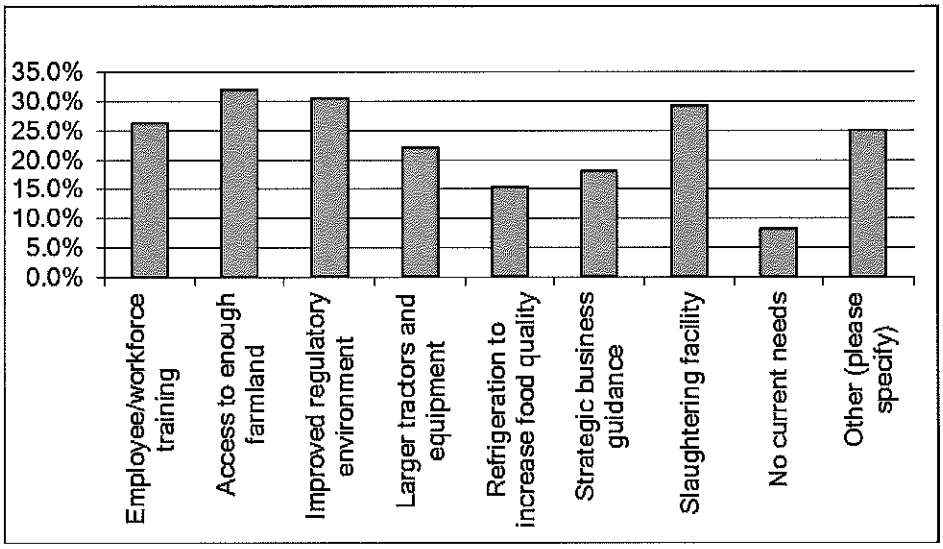
- The greatest issues facing farmers in your town:

Issue	Number of Responses
Property taxes	46
High land prices	30
Low profitability/low prices for products sold	27
Production Costs	26
Loss of farmland	17
Availability of labor	17
Development pressure in the area	16
Residential encroachment	15
Lack of processing facilities	13
Land use regulations	12
Fuel cost	12
Other taxes	12
Lack of farming support services	12
Cost of investment capital	12
Lack of family succession	11
Environmental regulations	10
Lack of market growth for farm products	8
Access to financing and investment capital	8
Marketing	7
Availability of land	6
Access to agri-services	5
Lack of local consumers	5

- Labor is largest barrier to expanding production, followed by property taxes
- Over 1/3 have had conflicts with non-farm neighbors
- More than half intend to increase farming operation, and/or diversify. Few intend to sell.
- Most would like to expand by selling directly from the farm, direct to consumers.
- Crops/Species of interest:

Beans	Ducks	Pumpkins
Beef	Flowers	Quail
Berries	Grains	Ramps
Chickens	Grapes	Shrubs
Christmas Trees	Hay	Small fruits
Corn	Honey	Soybeans
Cover Crops	Hops	Turkeys
Currents	Pigs	Vegetables

- Business needs in order to grow the business:



- Yes, local planning boards need more information about agriculture and farming (86%).
- Yes, there is interest in expanding into out of county markets (NYC, Albany)

At the February 25th Steering Committee meeting, the question was raised about where the farms were that respondents answered were neither in an agricultural district, nor enrolled in the agricultural assessment program.

- There were 7 respondents that answered 'no' to both questions 17 (Agricultural District) and 18 (Agricultural Assessment).These farms were located in: Pine Plains, Hyde Park, Clinton/Stanford (one farm, 2 towns), Dover, and Washington.
- The farms ranged in size from 3 to 150 acres, with a total of 323 acres, and an average size of 46 acres.
- Uses of this land include: Beekeeping, Cash crops, cattle, chickens, fruit, goats, horses, maple products (including birch syrup), sheep, turkeys, fiber, and one butterfly farm (the second largest parcel, at 100 acres).

Public Survey

Summary - 230 responses

- All towns and cities are represented. Hyde Park, Milan, Pine Plains, Pleasant Valley, Poughkeepsie, Red Hook, Standfordville, and Washington were among those locations that were most common however.
- 94% said local agriculture and farmland is very important to them.
- 94% said that the loss in farms and farmland over the past few decades is very important because agriculture is part of the regional economy, it maintains the town's rural character, availability of fresh local food is important and that agriculture preserves open space. The public clearly recognizes the many different roles agriculture plays. This includes economic and non-economic roles. 98% believe Agriculture

is important to the overall economy of Dutchess County. 89% said open space maintained by farms, including scenic views of farmland, are very important, 9% somewhat important and 1% not important.

- When making decisions about what food to buy, the 2 most important factors are freshness/quality and whether it is locally grown or produced. Price is an important factor, but not as important as quality and whether it is locally grown. 55% would be willing to pay a higher price for locally grown foods, but not if the prices is substantially higher. 43% willing to pay higher price.
- Food purchased at all the options except convenience store and through CSA's.
- Farmers markets that are used are :Adams, Amenia, Arlington, Beacon, Cold Spring, Fishkill, Grieg Farm, Hahn Farm, Hudson Valley Farm Market (Grieg Farm?), Hyde Park, Kingston, LaGrange, Migliorelli, Milan, Millbrook, Millerton, Montgomery Place, North East Farmers' Market, Pawling, (Paley's?), Pleasant Valley, Poughkeepsie/Vassar College, Red Hook, Rhinebeck, Saugerties, Schoharie County/Middleburgh, Stuart's Farm, formerly – Wassaic, Fishkill.
- 79% say more can or needs to be done by the State or County to preserve agriculture with 20.4% don't know.
- 60% say agriculture is a topic of general importance to other residents in your community. Comments added as to why it is of importance discuss how important it is to maintain open space, for food, jobs, and rural way of life. Some people commented that many residents don't think about where their food comes from and that the role farms play is not paid enough attention. There is general appreciation for rural character and quality of life which is attributed to farms.
- Survey participants seem to be very aware of the issues facing farmers and feel that taxes and financial difficulties are the biggest challenges. There is also recognition of labor issues, development pressure, cost of land, and concerns over lack of the next generation of farmers.
- About 69% said there were no other foods they desire that are not currently being raised. 31% said there were and those included apples, buffalo, goat products, additional meet products, and specialty products such as raw milk and mushrooms.
- 8% say they have encountered conflicts with a farmer or other agricultural operation; 92% say they have not.
- Some municipalities in other parts of New York State offer farmers reductions in local property taxes in exchange for their commitment to keep farm land in production. 78% strongly favor this; 15% somewhat favor this, 4% neutral, 2% somewhat oppose, and 1% strongly oppose.
- A strong majority supported all of the incentives or initiatives offered in question 17 for helping keep farming viable. The highest level of support was for tax incentives to preserve farmland, helping farmers obtain grants, and organize activities to promote locally-grown farm products. Just over half of the participants supported purchase of farmland or development rights programs.
- 90% would you support agricultural classes and Future Farmers of America (FFA) programs in high schools and BOCES, 9% maybe/undecided.

Municipal Officials Survey

Summary - 35 responses

- Majority felt agriculture is very important to the local economy or somewhat important. Two did not feel it was important. Similarly, about half felt farm-related businesses were very important to their local economy or somewhat important. Six said these types of businesses were not important. When asked why they were important, officials recognized that agriculture contributes to jobs, tourist economy as most

important, and then for property and sales taxes. Open space, local food, and lifestyle were other roles they mentioned.

- Every single participant agreed that farming contributes to their community in non-economic ways. There was a majority of agreement that farms contribute to green space, food, wildlife habitats, rural lifestyles, scenic values, farm animals, and cultural heritage. Access to local food was the top answer followed by scenic value and rural lifestyles.
- When asked about the overall level of support in the community for farming, there was a wide range of answers but there was moderate to high support overall. Two people indicated there was little interest in supporting agriculture in their community and an additional four people said there was some interest.
- There is recognition of the financial and tax issues faced by farmers. This was the number one answer for challenges facing farms in their community. Sprawl, labor, non-farm neighbors and regulations were other major challenges that were mentioned. In response to this, offering tax benefits, agriculture or other special districts, and venues for farmers markets were the most common response to what benefits the municipality offers to farms.
- Loss of farmland was very important to the majority of respondents (83%), or somewhat important (14%). Only one person indicated that loss of farmland was not important.
- 74% said they had programs or policies in place to protect farmlands or promote farming. These included including agriculture in comprehensive plans, allowing direct sales from farm stands, allowing farms in more than one zoning district, allowing for cluster/conservation subdivision, and allowing agricultural use of preserved open spaces. Ten out of the 35 indicated they had a right to farm law. Buffers, local PDR, local tax incentives and a Town Agricultural Advisory Committee were not common programs (identified by six participants).
- There was a lot of support for providing incentive financing to farmers who want to expand or diversify.
- Fairs, festivals and farmers markets are common. These included special events, community days related to farms, agricultural fairs, FFA or other festivals, farmers markets were the most common event held.
- About half indicated that they have farmers serving on planning or zoning boards. Eleven did not, and four did not know.
- Some conflicts with agriculture operations exist (about 30% of the participants were aware of such conflicts). These relate to smell, spraying, and manure, opposition to various zoning and land preservation initiatives, or other land use requirements.

Interviews

As part of the public input effort, telephone interviews were conducted with individuals or organizations identified by the Agricultural and Farmland Protection Plan Steering Committee and invited to be part of a Stakeholders Group . Twenty-one separate interviews were done. Interviewees included farmers, agri-businesses, farm-related organizations and land trusts, retail operations, and agencies such as the County Real Property Tax Office. The purpose of these interviews was to further identify the kinds of agricultural operations taking place or services being offered in the County and to be able to discuss in depth, issues facing farmers in general and their operation or organization in particular. Discussions revolved around what people felt were the strengths, weaknesses, and opportunities facing agriculture, and to explore trends they felt were important.

The following interviews were conducted:

Battenfeld's Christmas Tree Farm
Crop Production Services
Dan Briggs Finance and Business Planning
Dutchess County Agricultural Society
Dutchess County Agricultural and Farmland Protection Board
Dutchess County Real Property Tax Service
Dutchess County Tourism
Dutchess Land Conservancy
Farm Credit East
Glynwood Center
Hahn farm
Hearty Roots Community Farm
Hudson Valley Agribusiness Development Corporation (HVADC)
KT Tobin, Center for Research, Regional Education and Outreach (CRREO)
Lucy Hayden, Winnakee Land Trust
Mead Orchards
Miglorelli Farm
Mike Lawrence Farm
Red Devon Restaurant
Scenic Hudson Land Trust
Sisters Hill Farm

The information learned from these interviews was organized by topic, and as to whether the comment represented a strength, weakness, opportunity, or threat to agriculture in Dutchess County. The final SWOT analysis (section 5) incorporates all comments received.

Appendix 5. Review of Planning and Zoning

Highlights of Zoning and Comprehensive Plan Review

Why Review Zoning and Plans?

A comprehensive plan is the foundation for local land use regulation and is important because it also establishes the policies, vision, and strategies desired by a community. Land use regulations including zoning flow from the plan to meet those community objectives. Both can affect agriculture in many ways. Zoning can create opportunities or place barriers to farming. The goal of the agricultural and Farmland Protection Plan is to remove as many barriers as possible, and enhance the opportunities farm-friendly zoning can open up in a municipality.

At the most basic level, zoning often specifies where and what types of farms can operate and at what intensity farmland could be developed for other uses. Zoning identifies whether a farm use is permitted as of right, needing no further planning board review, or if it requires a lengthier process such as a site plan or special use permit approval. Some zoning laws go beyond this to regulate setbacks, height, and size of farm buildings. Others establish minimum acres required in order to be considered a farm, while still others regulate the number of animals a farmer could have.

Choices made by local communities in their zoning can drive up land values, make farm expansion or start-ups difficult, cause fragmentation of viable farmland, and hasten conversion to other uses. When local laws restrict agriculture, a sense of impermanence for farming can develop which in turn, can foster disinvestment in farm operations, and ultimately lead to sale of the land for development. This effect, coupled with the growth pressures being experienced, especially in the southern part of Dutchess County, and other farm-related issues such as aging farmers, an agricultural economy transitioning away from livestock and dairy, and the challenge of intergenerational transfer can make selling the land for non-farm development appealing.

The New York State Department of Agriculture and Markets provides several guides for municipalities including "Guidelines of Review of Local Zoning and Planning Laws" and "Local Laws and Agricultural Districts: Guidance for Local Governments and Farmers.

A review of local comprehensive plans and zoning laws was done to gauge the level of support given to agriculture in Dutchess County and to identify areas where these could be strengthened to promote farming. This review included eighteen towns and five villages, including towns that have land both in and out of New York State Agricultural Districts. The results of this review are translated into specific recommendations about changes that can be made locally to improve the farm-friendliness of plans and zoning laws.

The results are summarized below to give an overall picture of 'farm-friendliness' of municipalities in the county. Individual towns that may be interested in their specific audit can contact Dutchess County Planning and Development for that information. Appendix 5 includes the specific criteria used in this evaluation.

The following Towns were included in the review:

Wappinger, North East, Pawling, Clinton, LaGrange, Red Hook, Washington, East Fishkill, Pine Plains

For each community, both the comprehensive plan and zoning law were reviewed for 'farm-friendliness'. 'Farm-Friendliness' was gauged based on how the community planned for and promotes agriculture. Communities that are farm-friendly have the following characteristics:

Farm-Friendly Criteria

Comprehensive Plans

1. Their comprehensive plan has a section on agriculture.
2. Their plan includes maps of agricultural lands, important farmland soils, agricultural districts, and other farm-related resources to show the extent of agriculture and its character in Town.
3. It explores the role of agriculture in the community and public input was received that identified agriculture as an important component of the community.
4. The plan establishes a vision statement or goals that address agriculture and there is visible demonstration of the value of agriculture to the community in the plan.
5. The plan considers agriculture as an important resource in Town.
6. The plan recognizes or references a local or county agricultural and farmland protection plan.
7. The plan establishes policies towards farmland and farming. It discusses a policy for PDR, LDR or TDR as tools.
8. It identifies the value of farmland and farms to the community.
9. It offers recommended actions related to farming or farmland or ways to preserve or enhance farming.
10. The plan establishes a policy and/or future actions for the agricultural use of open space that may be created in a conservation subdivision or clustering.
11. The plan discusses NYS agricultural districts and how the town can be supportive of that.

Zoning Law

1. The zoning's purpose statement includes a discussion of agriculture, or promoting or preserving agriculture specifically.
2. Zoning allows agriculture as a permitted use by right.
3. Zoning does not prohibit agriculture in any district other than hamlet centers or commercial areas.
4. No special use permits for agriculture or ag-related uses are required in any district.
5. No higher density or commercial growth in core farm areas or where a NYS Agricultural District exists are allowed.
6. Zoning establishes a local agricultural zoning district, agricultural overlay district, or special use district for agriculture.
7. Zoning allows farms to have more than one business on the farmed parcel or offers flexibility to accommodate the needs of agricultural businesses.
8. Buffer areas between farmland and residential uses are required for new construction or subdivision.
9. Innovative development patterns that preserve farmland are encouraged, allowed, or mandated (conservation subdivision, clustering, TDR).
10. Off-site or on-site signs are allowed to attract and direct people to farm stands.
11. Farm stands, farm retail markets, agri-tourist businesses, breweries, etc. are allowed on the farmed parcel.
12. Farm processing facilities such as community kitchens, slaughterhouse, etc. are allowed.
13. Farm stands are not limited to selling just products from that one farm and do not need site plan review or special permits.

14. Zoning allows for accessory uses such as greenhouses, barns, garages, equipment storage etc., permitted as of right.
15. Application requirements include submittal of information or maps about farming that might be taking place on or near the project parcel, whether it is in an agricultural district, what farming activities take place on or near the site and whether prime farmland soils are present.
16. The PB or ZBA is charged with evaluating impacts of a project on agriculture.
17. Zoning defines agriculture, agricultural structure, farm worker housing, agri-tourism, agri-business and farm-related broadly and are not confined to a certain number of acres or income earned.
18. Non-traditional or retail based farm businesses are allowed.
19. The agricultural data statement as per AML 25-aa is required as part of an application for site plan, subdivision, special use or other zoning.
20. The agricultural disclosure statement is required on plans or plats when development takes place in a NY certified agricultural district.
21. Zoning defines and allows for farm worker housing, including use of mobile homes.
22. Silos and other farm structures are exempt from height requirements.
23. Personal wind mills and solar panels are allowed as a farm structure as per NYS either with permits or permitted as of right.
24. Zoning does not regulate farms by number of animals.

Summary Comprehensive Plan Review

For the most part, all the towns included in the review have comprehensive plans that address agriculture. Overall, long-range planning via comprehensive plans shows much support for agriculture in these nine towns. That is an excellent starting place. However, agriculture is treated differently in different locations. Some don't emphasize agriculture very much but place value on farms for their contribution to desired rural character. Others specifically identify the important role agriculture plays in the economy, environment, and culture of the community.

Comprehensive plan treatment of agriculture can, in general, be strengthened in the following ways:

a. Comprehensive plans should discuss and integrate data, maps, and recommendations from the County Agricultural and Farmland Protection Plan in a far greater way than currently exists. At the least, more detailed maps at the local level that show agricultural districts, prime farmland soils and soils of statewide significance and locations of active farm operations are critical to the overall planning process.
b. The County plan should be referenced and acknowledged at least. Seven of the nine communities did not discuss in anyway the County-level plan. One of the issues facing agriculture is lack of coordination. Some level of reference or coordination of agricultural programs between County and local communities will be important.
c. Town-level plans should identify, map, and discuss the role and importance of NYS Agricultural Districts and the Agricultural District Program more extensively. Four of the nine communities discussed Agricultural Districts. Of those four, none really discussed the programs and benefits of the Agricultural District, nor planned for any correlation of local programs with them.

Summary of Zoning Review

1. Red Hook, Pine Plains and Washington were the most farm-friendly of the nine. Wappinger and East Fishkill were less farm-friendly.
2. There is often a disconnect between plans and laws. The support shown for agriculture via the comprehensive plans often is not translated into a supportive regulatory climate for farms in zoning. Some towns that had farm-friendly plans did not have particularly farm-friendly zoning.
3. Only four of the towns included protection and promotion of agriculture as a purpose statement in the zoning. Strengthening zoning purpose statements specifying that maintenance of farms and protection of farmlands is a significant goal of the land use regulations is recommended.
4. Six of the nine Towns require special use permits for a variety of agricultural operations. Some require special use permits for farms that have large numbers of animals (especially caged poultry farms and pigs), farm stands, stables, and other agricultural uses. The Department of Agricultural and Markets generally views special use permit requirements for farm-related activities as unreasonable. It is recognized that a town may want some review over some types of agricultural operations and it is recommended that a modified site plan review be used instead of special use permits.
5. Ensuring some buffering, separation, or screening is vital to minimizing conflicts with non-farm neighbors. Yet, few towns require use of buffers between farm and non-farm uses (to be supplied by the non-farm use). Zoning should require use of buffers between farm and non-farm use.
6. Seven of the nine require site plan review for farm stands. This may be seen as unreasonable regulation. On-site retail sales of produce grown on farms is a critical farm related activity that should be encouraged. Direct sales is the direction many farms will need to take in order to be successful. That means that u-pick, farm retail, and other agri-tourism uses become very important. Zoning should not prevent these activities. In order to expand locally available and accessible food, farmers must be able to sell their products locally. Many of the towns require full site plan reviews or special use permits for farm stands, and larger farm retail operations. Many limit farm stands to selling only produce from that one farm, which also limits the ability of farmers to work together in a direct sales venture. There are certainly circumstances when a farm stand may need site plan to ensure safety, but a full scale site plan review for sales directly related to the farm is not advantageous. Zoning should allow for retail, niche, value-added and processing activities related to the farm operation. The Department of Agriculture and Markets recommends use of a modified site plan process that is more farm-friendly (see appendix 7 for model).
7. None of the towns have specific site plan or special use application submittals that could be used to help Planning Board and ZBA's determine impacts on agriculture taking place near a proposal. None require submission of information such as farmland soils, farm activities that are going on, whether the parcel is in a NY certified Agricultural District or not. Only two of the nine ask for the Agricultural Data Statement as part of an application. Note that NYS Agriculture and Markets Law 25-aa requires submission of an Agricultural Data Statement as part of an application for site plan and special use permits. At the least, zoning laws should be updated to require submission of the agricultural data statement. Ideally, application submittals should also include identification of active agriculture, farmland soils, and identification if the parcel is in a NYS Agricultural District.
8. Three of the nine towns specifically ask their planning or zoning board to evaluate impacts on farms. While these same communities ask for a detailed evaluation of impacts on wetlands, floodplains, scenic views, and other valuable community assets, impact on agriculture was generally not part of review processes. Although SEQRA asks for evaluation of impacts on ag, farm-friendly zoning should elevate agriculture as a resource on par with wetlands, and other features they do routinely review.

9. Most of the zoning laws do not address the current trend and need of farmers to diversify their operations. Diversification means that many farms now have more than one farm-related business on their parcel. Zoning should allow for multiple farm businesses along with agriculture on the parcel, provided that those secondary businesses relate to the farm operation. For example, an orchard should be able to have direct sales of apples, processing of apples into cider, and events and festivals designed to attract people to the farm store. There should be few barriers to these activities. Use of a modified site plan should be sufficient to ensure health and safety.
10. Generally, the definition sections of the zoning laws need to be updated. Many of the definitions used for agriculture, farms, and farm-related terms are not broad or flexible. Some laws have few definitions related to agriculture at all. Most do not define current terms such as ag-tourism, u-pick operations, food processing, farm stays, etc. A full set of definitions should be included in the laws. Further, these definitions should not limit the agricultural use to requiring a certain income or size of farm (acreage). Income and acreage limitations are large barriers especially to new start-up operations. Given that so many new farms are small, a zoning requirement that a farm has to be of a certain size could be a large issue. Six of the nine define a farm as a farm only if it is over a certain acreage. These ranged from three acres to 10 acres. Such acreage requirements can be a significant barrier for new farm start-ups, niche farms, organic farms or other such as nursery or specialty crops that don't need a lot of land.
11. Several of the laws limit the number of animals allowed, or require special facilities or permits for farms that have a larger number of animals. For example, one municipality limits a farm from having no more than five pigs, or less than 5000 poultry. Acreage and animal limits are a major farm operation barrier, especially to new farms from starting. The Department of Agriculture and Markets generally sees these kinds of restrictions as unreasonable.
12. Agricultural disclosure notices are important tools to alert and educate all parties that an active agricultural operation located in a NYS Agricultural District is involved. Only two of the nine towns require use of an agriculture disclosure notice to be printed on an approved plan or plat. This requirement notifies current and future landowners that the parcel is within a NYS Agricultural District and that they should be aware of the sights, sounds, and odors associated with a farm. Such a notice can educate people, and reduce conflicts. Currently, this Agricultural Notice is required by NYS law to be issued by a real estate agency at the point of sale when the property is in a NYS Agricultural District. However, it is recommended that farm-friendly communities make this a local requirement so that the disclosure notice is printed on plats and approvals. This requirement will help people understand the importance of the agricultural land uses and is highly recommended.
13. Four of the nine towns specifically allow for farm worker housing. The others do not mention it (in which case it may be prohibited), or may require special use permits for a use that is vital to the operation of some farms. This is of vital importance not just for those farms that rely on employees, but is also needed in situations where young farmers are renting land from someone and need to have a second residence placed on a farmed parcel.
14. Five towns do NOT exempt farm structures from height, setback or other dimension requirements. Such requirements can be a barrier to a farmer efficiently using their land and the Department of Agriculture and Markets generally sees these as unreasonable requirements. Zoning should exempt farm structures from those requirements.
15. Only one town includes small wind facilities as being allowed in the Town (and those are allowed with a special use permit). The others mention neither wind nor solar facilities at all, much less for farm use. The Department of Agriculture and Markets considers small wind and solar facilities used to generate power for the farm as a farm structure and thus have equal protection under the NYS Agricultural District law. It

is reasonable to review and permit these facilities however, with site plan or special use permit processes provided that they are allowed.

Matrix Used for Review of Dutchess County Comprehensive Plans and Land Use Regulations
How to determine if a plan or regulation is "farm-friendly"

Audit of Comprehensive Plan in _____			
Ask this question....	**Yes**	**No**	**Notes**
Does the plan have a section on agriculture?			
Does the plan include maps of agricultural lands, important farmland soils, agricultural districts, etc?			
Was the plan based on public input that included questions or exploration about the role of agriculture in the community? I.e. did a survey include questions about agriculture? Was there anything in workshops about it?			
Does the vision statement or goals address agriculture in any way? Is there any visible demonstration of the value of agriculture to the community in the plan?			
Does the plan consider agriculture as an important resource in Town?			
Does the plan recognize or reference a local or County agricultural and farmland protection plan?			
Does the plan include any data on farms and farmland? Acreage? Income or occupations from farming or other demographic data?			
Does the plan establish policies towards farmland and farming?			
Does it identify the value of farmland and farms to the community?			
Does it offer any recommended actions related to farming or farmland or ways to preserve or enhance farming?			
Does the plan establish a policy and/or future actions for the agricultural use of open space that may be created in a conservation subdivision or clustering?			
Does the plan discuss NYS agricultural districts and how the town can be supportive of that?			
Does it consider farmland a natural resource and encourage easements or other protections of that land? Is there a policy discussed for PDR, LDR or TDR?			

Audit of Comprehensive Plan in _____			
Ask this question….	**Yes**	**No**	**Notes**
Does the plan recommend growth in areas that are currently farmed? Does it recommend extension of infrastructure into core farm areas? Is agriculture a consideration of where growth does or not does not take place?			

Audit of Land Use Regulations (Zoning, Site Plan, Subdivision) in _____			
	Yes	**No**	**Notes**
Does the regulation's purpose statement include a discussion of agriculture, or promoting or preserving agriculture specifically?			
Does zoning allow agriculture as a permitted use by right in any district?			
Does zoning prohibit agriculture in any district?			
Does zoning require special use permits for agriculture or ag-related uses in any district?			
Does the zoning encourage higher density or commercial growth in core farm areas or where a NYS Agricultural District exists?			
Does the zoning establish a local agricultural zoning district, agricultural overlay district, or special use district for agriculture?			
Does the zoning allow farms to have more than one business or offer flexibility to accommodate the needs of agricultural businesses?			
Are buffer zones between farmland and residential uses required for new construction or subdivision?			
Are innovative development patterns that preserve farmland encouraged, allowed, or mandated (conservation subdivision, clustering, TDR)?			
Are off-site or on-site signs allowed to attract and direct people to farm stands?			
Are farm stands, farm retail markets, agri-tourist businesses, breweries, etc. allowed?			
Are farm processing facilities such as community kitchens,			

Audit of Land Use Regulations (Zoning, Site Plan, Subdivision) in _____			
	Yes	**No**	**Notes**
slaughterhouse, etc. allowed?			
Are farm stands limited to selling just products from that one farm? Do they need a site plan review or special use permit?			
Does zoning allow for accessory uses such as greenhouses, barns, garages, equipment storage etc permitted as of right?			
Do application requirements include asking for submittal of information or maps about farming that might be taking place on or near the project parcel? Whether it is in an agricultural district? What farming activities take place on or near the site? Whether prime farmland soils are present?			
Do standards exist that require the PB or ZBA to evaluate impacts of a project on agriculture?			
Do any design standards exist to direct building envelopes to areas on a parcel that would still allow farming to occur on remaining open spaces?			
Does the regulation define agriculture, agricultural structure, farm worker housing, agri-tourism, agri-business?			
Are farm-related definitions broad and flexible and not confined to a certain number of acres or income earned?			
Are non-traditional or retail based farm businesses allowed in a district or agricultural zoned district. For example, can a farmer set up a brewery on site and sell products onsite?			
Does the community have a farmer sitting on their Planning Board?			
Is an agricultural data statement as per AML 25-aa required as part of an application for site plan, subdivision, special use or other zoning?			
Does the community require placement of an agricultural disclosure statement on plans or plats when development takes place in a NY certified agricultural district?			
Are any ag-related uses required to get a special use permit or go through site plan review?			

Audit of Land Use Regulations (Zoning, Site Plan, Subdivision) in _____			
	Yes	**No**	**Notes**
Does the regulation define and allow for farm worker housing? Are mobile homes allowed as farm worker housing?			
Are silos and other farm structures exempt from height requirements?			
Are personal wind mills and solar panels allowed for farms? With permits or permitted as of right?			

Appendix 6. Agricultural Priority Area Identification Method

Note that the data used throughout this exercise is as current and complete as possible as of the date of adoption of this plan. We emphasize that the nature of the GIS data used will change over time. New parcels come into active farming, while others are converted to non-farming uses. Farmland changes hands, and new owners' practices may change with that. As parcels are developed, areas of conversion pressure will change. As new parcels are protected, the open space value of neighboring parcels will increase. All of these factors lead to the conclusion that any farmland priority formula that Dutchess County develops must be updated as situations change. The data used to produce the Farmland Priorities map today will not be useful for producing the same map 10 years from now. The list of criteria and the formula used to produce the map will hold up over time. But in order for the map to remain useful, it must be updated on a regular basis by using the newest data available.

Identification of Farms and Farmland

To begin the evaluation of farmland and identifying priority farmland areas, a comprehensive list of farmed parcels was developed using the County's tax parcel database and other sources. For the purposes of this analysis, all parcels that are enrolled in the Agricultural or Forest assessment program, or are located in one of the four county agricultural districts, were considered to be a farmed parcel. Reviewing the final result, the Farmland Priorities sub-committee felt this list of parcels and the resulting GIS layer reflected a complete accounting of active farmland in Dutchess County.

The Analysis Process

Many agricultural plans use a Land Evaluation and Site Assessment (LESA) analysis to "assess sites or land areas for their agricultural economic viability" (USDA SCS LESA Manual). However in Dutchess County, many data layers required for a LESA analysis either do not currently exist, or require time-intensive farm-by-farm analysis methods, that are not necessary for a county-level plan like ours. In addition, it was important to the Agricultural Plan Steering Committee to preserve farm operation confidentiality. Therefore, to make our "agricultural economic viability" analysis cost effective while preserving farm operation confidentiality, Dutchess County Planning and Development decided to use an alternate to LESA.

Cost effectiveness was achieved by using the rich collection of geographic data that Dutchess County has already developed. In many instances, these are equivalent to those used in the traditional LESA analysis. Using this readily-available data, with LESA and the Farmland Protection Board's PDR Criteria Worksheet as an outline, a method equivalent to LESA was developed with a prioritization matrix.

This matrix recorded whether a farm parcel is near to one of ten landscape and land-use geographies. Each geographic feature type has been identified as having either a positive or negative effect on the farm economy. To establish proximity of farm parcels to these features, a buffer layer of varying distances (see below) was created around each type.

Subsequently, each of these layers was weighted as to its relative importance to the farm economy (example: Prime agricultural soils would be given a higher weight factor than non-prime soils). This weighting was conducted by the Agricultural Plan Steering Committee, and considering the results of the Plan Surveys and stakeholder interviews. Intersection of a farm parcel with a weighted layer resulted in a score.

These scores are added together (or subtracted in the case of negative influence like proximity to development) for each farm parcel, and ranked. This score represents the agricultural economic viability of each farm parcel, and is an interim step in the creation of the final Agricultural Priority Areas Map.

The Steering Committee determined that the most important weighting criteria for agricultural viability were: 1) the overall size (acreage) and amount of prime and statewide-significant soils present in an area, and 2) the long-term viability, as measured by its existing agricultural designation (Agricultural Value Assessment, Agricultural District or Forest Value Assessment), proximity to a core area of agricultural land, and the gross profit from and investment in the farm operation. Soils and Agricultural viability account for 80% of the weighted score. Below is the complete weighting system.

The final step is to delineate agriculturally important areas (Agricultural Priority Areas) based on the viability scores. To do this, the viability scores are assigned to the center point (centroid) of each parcel. Using GIS software, a density map of all points is created for the entire county, with a "weight" equal to the viability score assigned to each point. The result is a continuous surface map in which more saturated colors indicate areas of a higher density of agricultural parcels that are most viable (agricultural priorities). Less saturated colors indicate areas with little or less-viable agriculture. Farm unit anonymity is assured through the aggregation of discrete points into continuous areas, which do not include parcel boundaries or proprietary information.

The Agricultural Priority area boundary is determined by selecting only the viability areas that have the highest 70% of scores. This threshold was based on a determination that all farm parcels previously identified by the Farmland Protection Board's PDR criteria evaluation process intersected the boundary.

Correction for Small Parcels: A legacy of some Agricultural District parcels is that after farming operations ceased, they were subdivided into smaller residential parcels. Our viability analysis uses a point for each parcel to generate a contour map. The effect is that many closely-spaced points on small, non-producing parcels gives these non-agricultural areas enhanced (and inaccurate) importance. To correct for this, all Agricultural District parcels under seven acres in size and earning less than $40,000 in profit were removed from the final contour map.

FACTORS AFFECTING AGRICULTURAL VIABILITY

The Steering Committee's GIS Subcommittee has proposed that the following layers will illustrate both positive and negative effects on the farm economy, the farm environment, and illustrate the value of farming to our communities. This list was compiled by equating Dutchess County's currently available data with the relevant information used by the Dutchess County Farmland Protection Board and the USDA in their LESA analysis to complete our agricultural analysis.

CONTRIBUTION OF SOILS TO AGRICULTURAL ECONOMY

A factor important to all farming is the quality of soils on the parcel being farmed. Highest yields (and potentially highest profits and economic value) are to be found in areas with soils that are most productive. Prime (P) and Statewide Significant (SSIG) soils have been identified as the highest-yielding soils.

Analysis of the importance of P&SSIG soils accounts for the presence of P&SSIG soils, the availability of the soils for farming (not developed and not forested), and the relative size of the parcel being farmed.

Analysis Steps

Agricultural parcels were overlain on the P&SSIG soil layer. Areas forested and within 100 feet of structures were identified, and eliminated from P&SSIG acreage totals. Acreage of P&SSIG soils were then calculated for each parcel, and a percentage of P&SSIG soils per parcel was calculated. Because a two-acre parcel that may have 100% P&SSIG soils would not have the same value to the farm economy as a hundred-acre parcel with 50% P&SSIG soils, a score which combined parcels size with area of P&SSIG soils, was calculated. The score for each parcel were then used in the prioritization matrix.

CONSEQUENCES OF CONVERSION

Farmland and Open Space Protection Program Parcels and Buffer are all properties protected by the Dutchess County Farmland and Open Space Protection Program, and those adjacent within 1000 feet.

Conservation Easement and Government-owned Parcels and Buffer are all properties protected by easements or are government owned, and those adjacent within 500 feet.

Agricultural Value Assessment and Forest Value Assessment are all properties that qualify for either of these special assessments.

CONVERSION PRESSURE

Biodiversity Blocks* are regions of natural diversity of over 1000 acres in size, identified in the County's Centers and Greenspaces Planning Principles. These areas are the most likely to support the widest diversity of flora and fauna, undisturbed by human habitation.

Development Pressure Buffers* are those areas where recent suburban sprawl has occurred. A selection was made of all parcels under 4 acres in size, upon which a house was built in the last twenty years, and in clusters of more than two houses. These properties were combined and buffered by one hundred feet.

> *Note: these scoring criteria are mutually exclusive, as one exerts a positive influence on farm viability, the other a negative. Parcels are either in one or the other category; if in neither – no points were added nor subtracted.

OPEN SPACE VALUE

Primary Aquifer Buffer is the Zone I, permeable deposits directly overlying the aquifer.

Wetland Buffer combines the NYSDEC wetlands and state-mandated buffers (100 feet) with federal wetlands and associated mandated buffers, if any, as regulated by local ordinance (varies by municipality).

Forested Parcels are those parcels enrolled in the NYS 480A program.

Natural Heritage Areas are NYS-developed critical habitat buffers around special ecological communities, and plant and animal species.

LONG TERM VIABILITY

Core Agricultural Areas, completed by the Farmland Protection Board, Dutchess County Soil and Water Conservation District, and Cornell Cooperative Extension Dutchess County GIS Lab identifies active farm units, accounting for the fact that the proximity of a farm to other farms is one of the best indicators of continued agricultural economic viability. Active farm unit score is assigned to agricultural parcels based on their inclusion in or proximity to a farm unit.

Agricultural designation are those parcels either with an agricultural value assessment, are in an agricultural District, or have a Forest Value Assessment.

Farm Unit's Contribution to the Agricultural Economy is a measure of profit from and investment in a farm operation, and was compiled as part of the Core Agricultural Areas database.

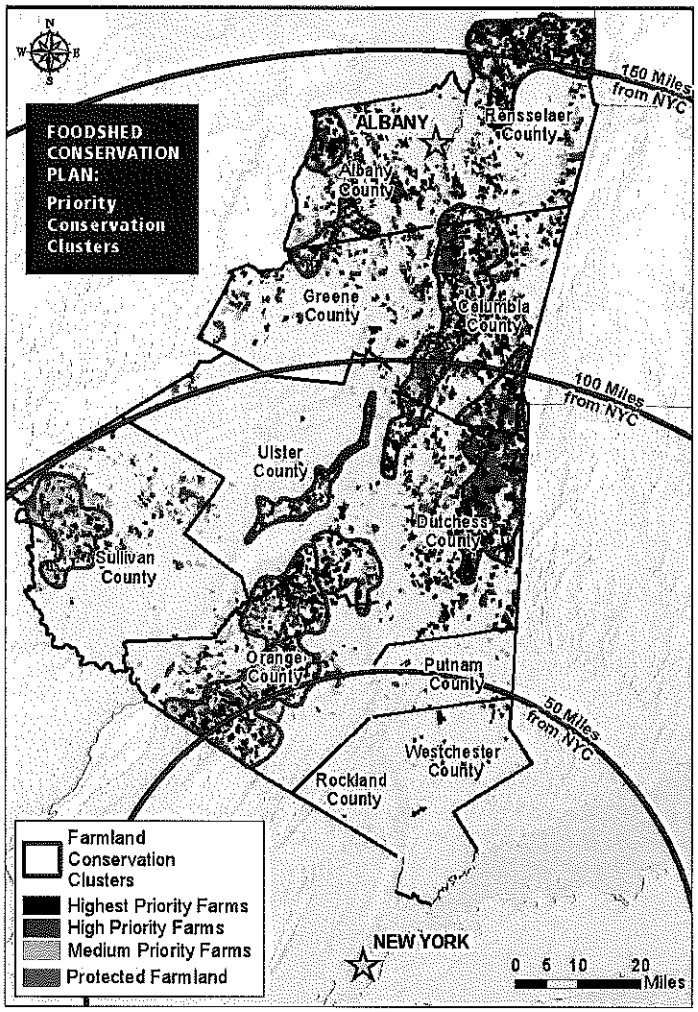
Ranking of Agricultural Viability Factors CATEGORY AND CRITERIA

	POINTS	
1. Contribution of soils to agricultural economy		**40**
A. Net P&SSIG soils over 75% and acreage over 100:	40	
B. Net P&SSIG soils over 75% and acreage between 50 and 100:	35	
C. Net P&SSIG soils over 75% and acreage between 10 and 50:	20	
D. Net P&SSIG soils over 75% and acreage under 10:	5	
E. Net P&SSIG soils >25% and <75% and acreage over 100:	30	
F. Net P&SSIG soils >25% and <75% and acreage between 50 and 100:	25	
G. Net P&SSIG soils >25% and <75% and acreage between 10 and 50:	20	
H. Net P&SSIG soils >25% and <75% and acreage under 10:	3	
I. Net P&SSIG soils under 25% and acreage over 100:	15	
J. Net P&SSIG soils under 25% and acreage between 50 and 100:	10	
K. Net P&SSIG soils under 25% and acreage between 10 and 50:	5	
2. Evaluate consequences of conversion		**10**
A. Parcel is subject to Public or Privately Funded Agricultural PDR	10	
B. Parcel is protected by Conservation Easement or Gov't. owned	9	
C. Property is Buffered by PDR	8	
D. Property is buffered by Permanent Conservation Property	7	
E. Property is receiving Agricultural Value Assessment or Forestry Exemption	3	
3. Evaluate Conversion Pressure		**4**
A. Property is within Biodiversity Blocks	4	
B. Property is outside of Biodiversity Blocks and Developed Areas	3	
C. Property is within Developed Area	-1	
4. Evaluate Open Space Value		**6**
If property is greater than 20 acres, multiply the criteria by 2		
A. Property Intersects the Buffer of 3 or more of the following	2 – 4	
B. Property Intersects the Buffer of 2 of the following	1.5 – 3	
C. Property Intersects the Buffer of 1 of the following	1 - 2	
a. Wetland buffer	1	
b. Forested parcel	1	
c. Natural heritage ecological community	1	
d. Natural heritage rare plant	1	
e. Natural heritage rare animal	1	
If in primary aquifer buffer, 2 points are added to the total.	2	
5. Consider Long Term Viability		**40**
Property located in a core area of Agricultural Land	**10**	
A. Included in a Farm Unit over 5,000 acres	10	
B. Included in a Farm Unit over 1,500 acres	8	
C. Included in a Farm Unit over 500 acres	6	
D. Included in a Farm Unit over 100 acres	4	
E. Included in a Farm Unit under 100 acres	2	
Property Has Existing Agricultural Designation		**20**
A. Property has Agricultural Value Assessment and in Agricultural District	20	
B. Property has Agricultural Value Assessment	15	
C. Property is in Agricultural District	10	
D. Property has Forest Value Assessment and in Agricultural District	7	
E. Property has Forest value Assessment	5	
Farm Unit's Contribution to the Agricultural Economy		**10**
A. Gross profit from agriculture is over $500,000	5	
a. Investment in farm unit is over $500,000	5	
B. Gross Profit from agriculture is over $200,000 and < $500,000	4	
b. Investment in farm unit is over $200,000 and <$500,000	4	
C. Gross profit from agriculture is over $100,000 and <$200,000	3	
c. Investment in farm unit is over $100,000 and <$200,000	3	

D. Gross profit from agriculture is over $40,000 and < $100,000	2	
d. Investment in farm unit is over $40,000 and < $100,000	2	
E. Gross profit from agriculture is over $10,000 and < $40,000	1	
e. Investment in farm unit is over $10,000 and < $40,000	1	
Total Maximum Score:		**100**

Appendix 7. Scenic Hudson's Foodshed Plan for New York City and the Hudson Valley

In April 2013, Scenic Hudson Published *Securing Fresh, Local Food for New York City and the Hudson Valley: A Foodshed Conservation Plan for the Region*. This plan demonstrates the close relationship of the New York City metropolitan area to farmland and food production in the Hudson Valley, and makes a strong case for preserving farmland in eleven Hudson Valley Counties within the range of New York City, including Dutchess County. The plan identifies and maps nine priority conservation areas, containing which it targets for strategic conservation. Two regions within Dutchess County comprising approximately 166,000 acres (not all priority farmland) fall within these priority areas (See Map below). Farms within these regions will likely have an increased chance of success in obtaining matching funding for PDR projects in the future.



Appendix 8. Land Use, Regulatory and Other Resources

Model Right To Farm Law

Be it enacted by the Town Board of the Town of _____ as follows:

Section 1. Legislative Intent and Purpose

The Town Board recognizes farming is an essential enterprise and an important industry which enhances the economic base, natural environment and quality of life in the Town of _____. The Town Board further declares that it shall be the policy of this Town to encourage agriculture and foster understanding by all residents of the necessary day to day operations involved in farming so as to encourage cooperation with those practices.

It is the general purpose and intent of this law to maintain and preserve the rural traditions and character of the Town, to permit the continuation of agricultural practices, to protect the existence and operation of farms, to encourage the initiation and expansion of farms and agri-businesses, and to promote new ways to resolve disputes concerning agricultural practices and farm operations. In order to maintain a viable farming economy in the Town of , it is necessary to limit the circumstances under which farming may be deemed to be nuisance and to allow agricultural practices inherent to and necessary for the business of farming to proceed and be undertaken free of unreasonable and unwarranted interference or restriction.

Section 2. Definitions

1. "Farmland" shall mean land used in agricultural production, as defined in subdivision four of section 301 of Article 25AA of the State Agriculture and Markets Law.

2. "Farmer" shall mean any person, organization, entity, association, partnership, limited liability company, or corporation engaged in the business of agriculture, whether for profit or otherwise, including the cultivation of land, the raising of crops, or the raising of livestock.

3. "Agricultural products" shall mean those products as defined in section 301(2) of Article 25AA of the State Agriculture and Markets Law, including but not limited to:

a. Field crops, including corn, wheat, rye, barley, hay, potatoes and dry beans.
b. Fruits, including apples, peaches, grapes, cherries and berries.
c. Vegetables, including tomatoes, snap beans, cabbage, carrots, beets and onions.
d. Horticultural specialties, including nursery stock, ornamental shrubs, ornamental trees and flowers.
e. Livestock and livestock products, including cattle, sheep, hogs, goats, horses, poultry, llamas, ratites, such as ostriches, emus, rheas and kiwis, farmed deer, farmed buffalo, fur bearing animals, milk and milk products, eggs, furs, and poultry products.
f. Maple sap and sugar products.
g Christmas trees derived from a managed Christmas tree operation whether dug for transplanting or cut from the stump.

h. Aquaculture products, including fish, fish products, water plants and shellfish.
i. Short rotation woody crops raised for bioenergy.
j. Production and sale of woodland products, including but not limited to logs, lumber, posts and firewood.

4. "Agricultural practices" shall mean those practices necessary for the on-farm production, preparation and marketing of agricultural commodities. Examples of such practices include, but are not limited to, operation of farm equipment, proper use of agricultural chemicals and other crop production methods, and construction and use of farm structures.

5. "Farm operation" shall be defined in section 301 (11) in the State Agriculture and Markets Law.

Section 3. Right-to-Farm Declaration

Farmers, as well as those employed, retained, or otherwise authorized to act on behalf of farmers, may lawfully engage in agricultural practices within this Town at all times and all such locations as are reasonably necessary to conduct the business of agriculture. For any agricultural practice, in determining the reasonableness of the time, place, and methodology of such practice, due weight and consideration shall be given to both traditional customs and procedures in the farming industry as well as to advances resulting from increased knowledge, research and improved technologies.

Agricultural practices conducted on farmland shall not be found to be a public or private nuisance if such agricultural practices are:

1. Reasonable and necessary to the particular farm or farm operation,
2. Conducted in a manner which is not negligent or reckless,
3. Conducted in conformity with generally accepted and sound agricultural practices,
4. Conducted in conformity with all local state, and federal laws and regulations,
5. Conducted in a manner which does not constitute a threat to public health and safety or cause injury to health or safety of any person, and
6. Conducted in a manner which does not reasonably obstruct the free passage or use of navigable waters or public roadways.

Nothing in this local law shall be construed to prohibit an aggrieved party from recovering from damages for bodily injury or wrongful death due to a failure to follow sound agricultural practice, as outlined in this section.

Section 4. Notification of Real Estate Buyers

In order to promote harmony between farmers and their neighbors, the Town requires land holders and/or their agents and assigns to comply with Section 310 of Article 25-AA of the State Agriculture and Markets Law and provide notice to prospective purchasers and occupants as follows: "It is the policy of this state and this community to conserve, protect and encourage the development and improvement of agricultural land for the production of food, and other products and also for its natural and ecological value. This notice is to inform prospective residents that the property they are about to acquire lies partially or wholly within an agricultural district and that farming activities occur within the district. Such farming activities may include, but not be

limited to, activities that cause noise, dust and odors." This notice shall be provided to prospective purchase of property within an agricultural district or on property with boundaries within 500 feet of a farm operation located in an agricultural district.

A copy of this notice shall be included by the seller or seller's agent as an addendum to the purchase and sale contract at the time an offer to purchase is made.

Section 5. Resolution of Disputes

1. Should any controversy arise regarding any inconveniences or discomfort occasioned by agricultural operations which cannot be settled by direct negotiation between the parties involved, either party may submit the controversy to a dispute resolution committee as set forth below in an attempt to resolve the matter prior to the filing of any court action and prior to a request for a determination by the Commission or Agriculture and Markets about whether the practice in question is sound pursuant to Section 308 of Article 25AA of the State Agriculture and Markets Law.

2. Any controversy between the parties shall be submitted to the committee within thirty (30) days of the last date of occurrence of the particular activity giving rise to the controversy or the date the party became aware of the occurrence.

3. The committee shall be composed of three (3) members from the Town selected by the Town Board, as the need arises, including one representative from the farm community, one person from Town government and one person mutually agreed upon by both parties involved in the dispute.

4. The effectiveness of the committee as a forum for the resolution of disputes is dependent upon full discussion and complete presentation of all pertinent facts concerning the dispute in order to eliminate any misunderstandings. The parties are encouraged to cooperate in the exchange of pertinent information concerning the controversy.

5. The controversy shall be presented to the committee by written request of one of the parties within the time limits specified. Therefore after, the committee may investigate the facts of the controversy but must, within twenty-five (25) days, hold a meeting at a mutually agreed place and time to consider the merits of the matter and within five (5) days of the meeting render a written decision to the parties. At the time of the meeting, both parties shall have an opportunity to present what each consider to be pertinent facts. No party bringing a complaint to the committee for settlement or resolution may be represented by counsel unless the opposing party is also represented by counsel. The time limits provided in this subsection for action by the committee may be extended upon the written stipulation of all parties in the dispute.

6. Any reasonable costs associated with the function of the committee process shall be borne by the participants.

Section 6. Severability Clause

If any part of this local law is for any reason held to be unconstitutional or invalid, such decision shall not affect the remainder of this Local Law. The Town hereby declares that it would have passed this local law and

each section and subsection thereof, irrespective of the fact that any one or more of these sections, subsections, sentences, clauses or phrases may be declared unconstitutional or invalid.

Section 7. Precedence

This Local Law and its provisions are in addition to all other applicable laws, rules and regulations.

Section 8. Effective Date

This Local Law shall be effective immediately upon filing with the New York State Secretary of State.

Model Disclosure Notice

"It is the policy of this state and this community to conserve, protect and encourage the development and improvement of agricultural land for the production of food, and other products, and also for its natural and ecological value. This disclosure notice is to inform prospective residents that the property they are about to acquire lies partially or wholly within an agricultural district and that farming activities occur within the district. Such farming activities may include, but not be limited to, activities that cause noise, dust and odors. Prospective residents are also informed that the location of property within an agricultural district may impact the ability to access water and/or sewer services for such property under certain circumstances. Prospective purchasers are urged to contact the New York State Department of Agriculture and Markets to obtain additional information or clarification regarding their rights and obligations under article 25-AA of the Agriculture and Markets Law."

Model Agricultural Data Statement

Instructions: This form must be completed for any application for a special use permit, site plan approval, use variance or a subdivision approval requiring municipal review that would occur on property within 500 feet of a farm operation located in a NYS Agriculture and Markets certified Agricultural District. County Planning Board review is also required. A copy of this Agricultural Data Statement must be submitted along with the referral to the Dutchess County Planning Department.

1. Name and Address of Applicant_____

2. Type of application (Check one or more):

__Special Use Permit __Site Plan Approval __Use Variance __Subdivision approval

3. Description of proposed project to include (1) size of parcel or acreage to be acquired and tax map identification number of tax parcel(s) involved; (2) the type of action (single-family dwelling or subdivision, multi-family development, apartment, commercial or industrial, school, non-residential use, etc., and (3) project density (Please provide this information on the reverse side of this application and attach additional description as necessary).

4. Is this parcel within an Agricultural District? __Yes __No

5. If Yes, what is the Agricultural District Number? _____

6. Is this parcel actively farmed? __Yes __No

7. List all farm operations within 500 feet of your parcel. Attach additional sheets if necessary.

A. Name:_____
Address and Telephone #:_____
Type of Farm:_____
Is this parcel actively farmed? __Yes __No

B. Name:_____
Address and Telephone #:_____
Type of Farm:_____
Is this parcel actively farmed? __Yes __No

C. Name:_____
Address and Telephone #:_____
Type of Farm:_____
Is this parcel actively farmed? __Yes __No

D. Name:_____
Address and Telephone #:_____
Type of Farm:_____
Is this parcel actively farmed? __Yes __No

8. Signature of Applicant:_____

9. Reviewed by:_____
Date:_____

Model Scope of Work of Local Agriculture Committee

Purposes

The purpose of the Agricultural Advisory Committee is twofold: first, to advise the Town Board, Planning Board and other Town agencies on matters pertaining to the preservation, promotion, and ongoing operation of agricultural activity in the Town of _____; and second, to implement, or guide the implementation of, the recommended actions in the plan. Of particular importance are 1) help educate non-farmers; 2) promote and market local agricultural products and services; 3) offer regulatory guidance to the Town Board or Planning Board related to agriculture; 4) promote the economic viability of farming; 5) to assist in conflict resolution; and 7) assist farmers by serving as the agricultural navigator to goods, services, and agencies working on behalf of agriculture in the Town.

Committee; Personnel; Appointment; Organization.

There is hereby established in the Town of _____ a permanent committee to be known and designated as the "Town of _____ Agricultural Advisory Committee" which shall consist of five (5) residents of the Town of _____ who are engaged in farming, agri-business, or a vocation related to agriculture; and two (2) residents of the Town of _____ who shall serve as ex-officio members, one of whom shall be a Town Board member and one who shall be a Planning Board member. Ex-officio members shall only be eligible to serve on the committee while they hold the other cited Town office. The members of the said committee first appointed shall serve for terms as follows: two (2) appointees for three (3) year terms; two (2) appointees for four (4) year terms and one (1) appointee for a five (5) year term. Thereafter, all appointments shall be for terms of five (5) years and vacancies shall be filled for the unexpired term only. The members shall serve until their respective successors are appointed. The members of the committee shall receive no compensation for their services.

The committee shall select from among its members a chairperson and such other officers as it may deem necessary and establish rules of order to conduct their business. The Agricultural Advisory Committee shall report to the Town Board at least annually setting forth and detailing the activities and operations of the committee during the preceding year.

Committee Assistance and Funding.

The Agricultural Advisory Committee may request technical assistance and/or specialized advice from any resource it may deem appropriate, including but not limited to other local residents; other Town of _____ officials; Dutchess County Planning; County Cooperative Extension Dutchess County; County Soil and Water Conservation; Dutchess County Agriculture and Farmland Protection Board; NY Farmland Trust and NYS Agriculture and Markets. However, no contracts for payment for services or other expenditure of Town funds may be entered into by the Committee.

As a citizen advisory committee, the Agricultural Advisory Committee may not authorize any expenditure of Town funds. Funds necessary for proper committee operation may be requested by the committee from the Town Board and, in accordance with customary procedures, the Town Board may authorize such funds and approve the expenditure thereof.

Responsibilities of Committee
The responsibilities of the committee shall be as follows:

1. To recommend methods, review proposals, and develop proposals and strategies for the implementation of the agricultural goals of the Town of _____, and report their findings to the Town Board. This includes, but is not limited to communication with local farmers, interact with other government agencies, facilitate local presentation of educational programs, to encourage and assist applications to farmland preservation programs, to encourage appropriate farmland protection activities, to study and comment on government proposals that may have an impact on local farms and to write and administer grant applications when approved by the Town Board.

2. To, from time to time, work with the Town to amend and update local plans and laws as needed to reflect the needs of agriculture and refer such updates and amendments to the Town Board.

3. To identify methods whereby the Town Board, County or State governments can encourage existing farmers to continue in active agricultural operation.

4. To, when requested by the Town Board or other agencies engaged in an environmental review of proposed private or public development projects and/or infrastructure projects, provide input regarding the impacts on agriculture of such projects.

5. To recommend to the Town Board, Town Planning Board and/or other agencies techniques that will help preserve large, contiguous and economically viable tracts of agricultural land.

6. To recommend to the Town Board reasonable and desirable changes to this listing of responsibilities or to accomplish any other tasks referred to it by the Town Board or other local agencies having to do with agricultural related activities.

Model Modified Site Plan Review Law

The following is a model modified site plan review developed by the NYS Department of Agriculture and Markets for Site Plan Review for Farm Operations within an Agricultural District:

Many local governments share the Department's view that farm operations should not have to undergo site plan review and exempt farms from that requirement. However, the Department recognizes the desire of some local governments to have an opportunity to review farm operations and projects within their borders, as well as the need of farmers for an efficient, economical, and predictable process. In view of both interests, the Department developed a model streamlined site plan review process which attempts to respond to the farmers' concerns while ensuring the ability to have local land use issues examined. The process could be used to examine a parcel's current characteristics and its surroundings in relation to any proposed activities on the farm and their potential impact to neighboring properties and the community. For example, municipalities could specify that farm operations located within specific zoning districts must submit to site plan review. Municipalities may also elect to exempt farm operations, located within a county adopted, State certified agricultural district, from their site plan review process.

The authorizing statutes for requiring site plan review are quite broad and under "home rule" municipalities retain significant flexibility in crafting specialized procedures (e.g., the selection of a reviewing board; uses which trigger submission of site plans; whether to have a public hearing and the length of time to review an application). Town Law §274-a and Village Law §7-725-a define a site plan as "a rendering, drawing, or sketch prepared to specifications and containing necessary elements as set forth in the applicable zoning ordinance or local law which shows the arrangement, layout and design of the proposed use of a single parcel of land... ." These sections of law further outline a list of potential site plan elements including parking, means of access, screening, signs, landscaping, architectural features, location and dimensions of buildings, adjacent land uses and physical features meant to protect adjacent land uses as well as additional elements.

Many municipalities have also added optional phases to the site plan review. While a preliminary conference, preliminary site plan review and public hearings may assist the applicant earlier in the review process and provide the public an opportunity to respond to a project, they can result in a costly delay for the farmer. For the sake of simplicity, the model site plan process and the following guidance presume that the planning board is the reviewing authority.

Site Plan Process

The applicant for site plan review and approval shall submit the following:

1. Sketch of the parcel on a location map (e.g., tax map) showing boundaries and dimensions of the parcel of land involved and identifying contiguous properties and any known easements or rights-of-way and roadways.
2. Show the existing features of the site including land and water areas, water or sewer systems and the approximate location of all existing structures on or immediately adjacent to the site.
3. Show the proposed location and arrangement of buildings and uses on the site, including means of ingress and egress, parking and circulation of traffic.
4. Show the proposed location and arrangement of specific land uses, such as pasture, crop fields, woodland, livestock containment areas, or manure storage/manure composting sites.

5. Sketch of any proposed building, structure or sign, including exterior dimensions and elevations of front, side and rear views. Include copies of any available blueprints, plans or drawings.
6. Provide a description of the farm operation (existing and/or proposed) and a narrative of the intended use and/or location of proposed buildings, structures or signs, including any anticipated changes in the existing topography and natural features of the parcel to accommodate the changes. Include the name and address of the applicant and any professional advisors. If the applicant is not the owner of the property, provide authorization of the owner.
7. If any new structures are going to be located adjacent to a stream or wetland provide a copy of the floodplain map and wetland map that corresponds with the boundaries of the property.
8. Application form and fee (if required).

If the municipality issues a permit for the structure, the Code Enforcement Officer (CEO) determines if the structures are subject to and comply with the local building code or New York State Uniform Fire Prevention and Building Code prior to issuing the permit. Similarly, the Zoning Enforcement Officer (or the CEO in certain municipalities) would ensure compliance with applicable zoning provisions.

The Department urges local governments to take into account the size and nature of the particular agricultural activity, including the construction of farm buildings/structures when setting and administering any site plan requirements for farm operations. The review process, as outlined above, should generally not require professional assistance (e.g., architects, engineers or surveyors) to complete or review and should be completed relatively quickly.2 The Department understands, however, that in some cases, a public hearing and/or a more detailed review of the project which may include submission of a survey, architectural or engineering drawings or plans, etc., may be necessary. The degree of regulation that may be considered unreasonably restrictive depends on the nature of the proposed activities, the size and complexity of the proposed agricultural activity and/or the construction of buildings or structures and whether a State agricultural exemption applies.

Appendix 9. Agricultural Assessment Program and Agricultural District Program

What are the differences?

The **Agricultural Assessment t Program** , established under the Agriculture&: Markets Law§ 305, allows active farmland to receive a reduced assessment for property tax purposes -resulting in a partial exemption from real property taxes . ***Farmland qualifying for this reduction .in assessed value does not have to be enrolled .in an Agricultural District.*** Any owner of at least seven acres of land which produces a minimum of $10,000 annually, or any owner of less than seven acres of land which produces a minimum of $50,000 annually, on average in the preceding two years, from the sale of crops, livestock, or livestock products, or from commercial horse boarding, is eligible to receive an agricultural assessment . The program only applies to the land, not buildings or homesteads.

Certain start up farm operations are eligible to receive an agricultural assessment in the first year of operation on owned or rented land if they meet the minimum acreage and sales thresholds.

Owners who rent productive land to farmers may qualify for agricultural assessment if the land independently satisfies the minimum acreage and sales requirements or is being used pursuant to a lease agreement of five or more years in conjunction with land which independently qualifies.

The Agricultural Assessment Program establishes a ceiling value for taxable assessments on eligible farmland The local assessor is provided with State Certified ceiling values every year. Any assessed value which exceeds the agricultural assessment is exempt from Real Property taxation. Landowners must file an application annually, usually by March l, with the local assessor to be considered for the Agricultural Assessment Program. Failure to file the application on time will result in denial of the exemption.

If land that benefited from an Agricultural

Assessment is converted to non-agricultural use (within five years of last benefit if in an Agricultural District or within eight years if not in an Agricultural District) it may be liable for conversion payments based on the amount of taxes saved The consequence of conversion is based on five times the taxes saved in the most recent year of benefit. The payment also includes a six percent interest charge compounded annually for each year during the last five, in which the land received an agricultural assessment . An encumbrance for this

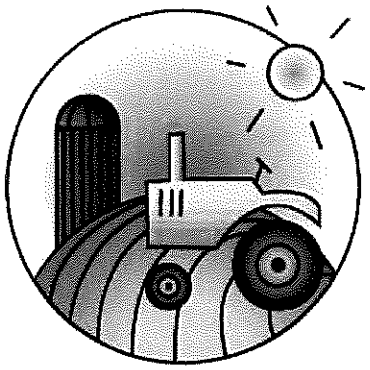
potential payment runs with the land from the last year in which the pared benefited and continues for five years if in an Agricultural District and for eight years if outside a district. Owners contemplating a conversion may determine the payment owed by contacting their local assessor or the County Real Property Tax office.

The Agricultural District Program, was established under Agriculture &: Markets Law§ 303. It provides agricultural landowners a number of benefits and protections not associated with property tax relief, which encourage farmers to continue farming. Enrollment .in an Agricultural District does not automatically qualify the property for the Agricultural Assessment Program.

An agricultural district is a geographic area which consists of predominantly viable agricultural land Districts may include land that is actively farmed, idle, forested, as well as land for residential and commercial uses.

The Agricultural District Law protects farm operations"' within an agricultural district from the enactment and administration of unreasonably restrictive local regulations unless it can be shown that public health or safety is threatened Under Agriculture and Markets Law§ 308, known as the 'Right to Farm' law, if a question or dispute arises regarding farm practices that may threaten public health or safety, an opinion can be requested of the Commissioner of Agriculture and Markets as to whether or not sound agricultural practices are being followed.

Every eight years a full review of the Agricultural Districts is conducted pursuant to Agriculture &: Markets Law§ 303 a; the last review was in 2008. Agriculture&: Markets Law 303 b opens an annual window of opportunity for certain parcels to be added to the district. An application for annual enrollment must be filed with the Dutchess County Soil and Water Conservation District between April l5 and May 14 to be considered for inclusion in an agricultural district. If approved, the land remains in the agricultural district for the remainder of the eight year period.



*In most cases, to be considered a 'farm operation' qualification for agricultural value assessment must be met.

Differences at a Glance

Agricultural Assessment Program

- Provides property tax reduction on farmland
- Does not have to be in an agricultural district to qualify
- Owner must file application annually with local assessor; usually no later than March 1
- Minimum 7 acres in active farm production and proof of minimum $10,000 gross annual income from farming
- If less than 7 acres, $50,000 gross income minimum
- Property annually committed to agricultural use for minimum of 8 years if not in an agricultural district; 5 years if in an agricultural district
- Property subject to payback of saved property tax dollars if land is converted to non-agricultural use within committed period
- Land in agricultural production and rented to farmer may qualify
- Eligibility determined by local assessor based upon State law specifications
- Assessed agricultural value based upon State certified land classifications

Agricultural District Program

- Provides certain protections for agricultural land
- Land may or may not qualify for Agricultural Assessment Program
- Districts are reviewed every eight years (last in 2008)
- Owner must apply for Agriculture District designation during established review period
- Annual window for inclusion available for certain types of agricultural land
- All applications for annual inclusion must be filed between April 15 and May 14 - contact Dutchess County Soil and Water Conservation office or Cornell Cooperative Extension Dutchess County for information on application process
- Applications reviewed by Dutchess County Agricultural and Farmland Protection Board and subject to approval of County Legislature and State Commissioner of Agriculture and Markets

For Further information:

Dutchess County Soil and Water Conservation District 845 677 8011 http://dutchessswcd.org
Cornell Cooperative Extension Dutchess County 845 677 8223 www.ccedutchess.org
NYS Department of Agriculture and Markets http://www.agmkt.state.ny.us/APIagservices/agdistricts.html
Dutchess County Real Property Tax Service Agency 845 486 2148
Local Assessment Offices

Prepared by the Dutchess County Agricultural and Farmland Protection Board, 2010

Appendix 10. Model Agricultural Coordinator (from Jefferson County)

General Statement of Duties

The Jefferson County Agricultural Coordinator assists in the stabilization, growth and promotion of the agricultural industry of Jefferson County. The Coordinator serves as a resource to help develop financial and marketing programs and acts as a spokesperson for agriculture. The community may utilize the Coordinator as a person to help find solutions to agricultural needs and concerns.

Distinguishing Features of the Position

The Agricultural Coordinator is responsible for working with individuals and/or entities interested in establishing new ag. Enterprises or improving the viability of existing operations in Jefferson County. The Coordinator will aid in assembling financial packages and plans available to help finance agricultural interests. This person will assist in identifying ag. Needs and developing coordinated solutions. Better marketing programs for products and opportunities will be created. The person in this position will work with existing agencies and organizations to coordinate efforts helping agriculture in Jefferson County grow stronger and more prominent.

Typical Duties Include but are not limited to:

Identifying Agricultural Needs and Developing Solutions

- Prepare, implement and update strategic plans for agricultural economic development.
- Facilitate the development of solutions to the needs and concerns of agriculture including the shortage of trained, skilled labor and profitable markets for ag. products.
- Assist in the creation of an agricultural local development corporation.
- Work with public and private sector interests to provide coordination of resources for the ag. industry.
- Maintain a complete knowledge and understanding of the interrelationships of resources available for agriculture.
- Help develop linkages with other nonagricultural industries.
- Work with natural resources agencies to provide for an assessment of natural resources in Jefferson County.

Agricultural Financing

- Developing financial packages to help new agricultural ventures establish in Jefferson County including the development of feasibility studies and business plans.
- Attracting new investments in agriculture including agribusiness, production agriculture, and agri-tourism.
- Providing assistance to the ag. industry with endeavors to diversify.
- Explore, evaluate and implement creative and innovative methods to maintain existing and new ag. enterprises to help increase the value of the industry measured in total annual sales and increased retained earnings.
- Encouraging and helping ag. entrepreneurs take advantage of funding resources available.

Agricultural Marketing

- Identifying, developing and implementing promotion and marketing programs of ag. products and opportunities, and the importance of the ag. industry in Jefferson County.

- Explore and utilize leads and opportunities in marketing and funding agriculture in Jefferson County.
- Promote better brand recognition of Jefferson County agricultural products.
- Education and Public Relations
- Facilitate the development and implementation of programs training students in agricultural industries and careers.
- Assume role as a spokesperson for agriculture.
- Serve as ombudsman for the local ag. industry.
- Support and serve as a resource to the County Ag. Farmland Protection Board.

Appendix 11. Inventory of Resources

County Agencies and Organizations

Dutchess County Agricultural and Farmland Protection Board

County Agricultural District Review & Mapping

Dutchess County Department of Planning and Development

Development of the County's agricultural and farmland protection plan

NYS GML 239 reviews

Agricultural and Farmland Protection Board

Partnership for Manageable Growth

Hudson River Valley Greenway Compact/Greenway Guides

Dutchess County Tourism

Farm Fresh Map and Guide and general education, advocacy, cultural programming

Dutchess Putnam Westchester Farm Bureau

Cornell Cooperative Extension Dutchess County

Offers agricultural education, resource-based information, and farm business management assistance to farmers. Strategic initiatives in agricultural sustainability and economic development.

Small Farms Program

Farm to School Program

Soil Testing, Livestock Education, Equine Education, Field Crops, Agricultural Districts and Public Policy, Pasture Management, Dutchess County Animal Response Program, Commercial Horticulture (ENYCHP), Youth and 4-H, Community Gardening, Ag in the Classroom

Dutchess County Soil and Water Conservation District

Primary goal is to protect and improve water quality and enhance and preserve natural resources.

Offers technical and financial assistance for the design and installation of soil and water conservation practices, including barnyard runoff control, stream protection, cropland erosion control, and nutrient management.

Whole Farm Plans, Nutrient Management Plans, Agricultural Value Assessment Soil Worksheets, Agricultural Environmental Management (AEM), Tree & Shrub Seedling Sale

Dutchess Land Conservancy

Working with the County Farmland Protection Board, since 2001 DLC has leveraged numerous federal, state, county, town, and private funding sources to secure millions of dollars for farmland protection in Dutchess County

Farm Credit East

Dairy and Winery Benchmarks

FarmStart -Young, Beginning, Small and Veteran Farmer Incentive Program (YBS)

Financial Partner Magazine

GenerationNext

New York State Farm Worker Housing Loan Program.

Regular office operations.

Farm Service Agency

Farm commodity, credit, conservation, disaster and other loan programs

Dutchess County Real Property Tax Service Agency

Dutchess County Sheep and Wool Growers Association

Northern Dutchess Alliance

The mission of the Northern Dutchess Alliance (NDA) is to foster the creation of a long range plan for regional cooperation and economic development. This mission is accomplished through several mechanisms, including the creation of a Blueprint for Economic Development, and working with various partners including NYS Department of State, and Sustainable Hudson Valley.

Regional Agencies and Organizations

Hudson Valley Agribusiness Development Corporation

Expertise and resources for agriculture-related businesses in the Hudson Valley, from analysis and start-up assistance for new ventures to market expansion and improved distribution networks for existing agricultural businesses.

Incubator Without Walls: Comprehensive business assistance, value-added services, financing, and networking.

Hudson Valley Bounty: Initiative designed to promote local foods and support connections between local agricultural producers and culinary businesses.

American Farmland Trust, New York Office

Scenic Hudson

Dedicated to "protecting and restoring the Hudson River, its riverfront and the majestic vistas and working landscapes beyond as an irreplaceable national treasure for America and a vital resource for residents and visitors."

Active in farmland protection through the purchase of conservation easements in Columbia, Dutchess, Orange, and Ulster Counties.

Glynwood Center – Hudson Valley Farm Business Incubator

Provides the tools and resources aspiring agricultural entrepreneurs need to develop and manage viable farm enterprises; offers access to land, housing, shared equipment and

infrastructure, farm and business mentoring, technical classes, peer learning opportunities, and working capital.

Hudson River Valley Greenway

CRREO – Center for Research, Regional Education and Outreach

Has included agriculture in its research and Regional Well-Being series, including the Discussion Brief #5 in Spring 2011 – Agriculture Supporting Community in the Mid-Hudson Region

Hudson Valley Regional Fruit Program

Multi-county educational program serving the commercial fruit industries of the lower Hudson Valley region; participating Cornell Cooperative Extension associations include Columbia, Dutchess, Orange, and Ulster Counties.

Website features numerous resources related to commercial fruit production in the Hudson Valley and New York.

Heroic Food Farm

Hands-on training program to prepare military veterans for careers in sustainable farming, agricultural trades, and food entrepreneurship in a veteran-supportive environment.

Hudson Valley Fresh

Open Space Institute (OSI)

Local Economies Project (LEP)

New England Small Farm Institute

Promotes small farm development by providing information and training for aspiring, beginning and transitioning farmers.

Northeast Beginning Farmers Project

Northeast Center for Food Entrepreneurship

New York State Agencies and Programs

NYS Department of Agriculture and Markets

Division of Agricultural Development aims to strengthen the viability and consumer awareness of New York's food and agricultural industry; includes activities and services in market development, business development and support.

Specialty Crop Block Grant Program: Funding to enhance the competitiveness of specialty crops, defined as "fruits, vegetables, tree nuts, dried fruits, horticulture, and nursery crops (including floriculture)."

Organic Farming Development/Assistance: Guidance in locating resources on organic agriculture and organically produced foods.

Pride of New York Program

NYSDAM website with information on over 3,000 "Pride Of New York" members and their products.

Additional funding opportunities announced periodically.

New York State Energy Research and Development Authority (NYSERDA)

Offers objective information and analysis, innovative programs, technical expertise, and funding to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels.

Programs and funding opportunities for the agricultural sector - http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/Sectors/Agriculture.aspx

Farmers Market Federation of New York

New York Ag Connection

New York Farm Bureau

New York FarmLink

New York Farmnet

New York Farm Viability Institute

New York Sustainable Agriculture Working Group

Small Scale Food Processors Association of New York

Federal Government Agencies and National Programs

USDA Agricultural Marketing Service

Administers programs that facilitate the efficient, fair marketing of U.S. agricultural products, including food, fiber, and specialty crops; provides the agricultural sector with tools and services that help create marketing opportunities.

USDA Farm Service Agency

Farm Loan Programs: Direct loans and loan guarantees to help family farmers start, purchase, or expand their farming operation; includes Farm Ownership Loans, Farm Operating Loans and Microloans, Emergency Farm Loans, Land Contract Guarantees, Loans for Beginning Farmers, etc.

Biomass Crop Assistance Program: Financial assistance to owners and operators of agricultural and non-industrial private forest land who wish to establish, produce, and deliver biomass feedstocks.

USDA Natural Resources Conservation Service

Agricultural Management Assistance: helps agricultural producers use conservation to manage risk and solve natural resource issues through natural resources conservation.

Conservation Stewardship Program: helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resources concerns.

Environmental Quality Incentives Program (EQUIP): provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation or improved or created wildlife habitat.

Agricultural Conservation Easement Program: provides financial and technical assistance to help conserve agricultural lands and wetlands and their related benefits. (Note: This is a new program under the 2014 Farm Bill that consolidates three former programs – the Wetlands Reserve Program, Grassland Reserve Program and Farm and Ranch Land Protection Program.)

WHIP – Wildlife Habitat Improvement Program

CRP – Conservation Reserve Program

Crep – conservation reserve enhancement program

Small watershed program

USDA New Farmers Website

USDA Rural Development, New York Office

Value-Added Producer Grants: provides agricultural producers with matching funds for value-added ventures that will increase the return on their agricultural commodities; can be used for planning (e.g., feasibility studies, business plans) and/or working capital.

Rural Energy for America (REAP): grants and guaranteed loans to help agricultural producers purchase and install renewable energy systems and make energy efficiency improvements.

Farm Labor Housing Program: Direct loans and grants for new construction or substantial rehabilitation of safe, affordable rental housing for farm workers.

Farm Aid

Farmer Resource Network

Agricultural Marketing Resource Center

- Addresses marketing and business planning for U.S. agricultural producers.

CADE, The Center for Agricultural Development and Entrepreneurship

Farmer Veteran Coalition

National Farm to School Network

National Good Agricultural Practices Program

National Sustainable Agriculture Information Service

Sustainable Farming Internships - http://attra.ncat.org/attra-pub/internships

National Young Farmers Coalition

Northeast Organic Farming Association

Beginning Farmer, Apprentice, and Mentorship Programs - http://www.nofany.org/bfam

Northeast Sustainable Agriculture Research and Education

Offers grants for funding relevant agricultural research projects.

WWOOF (World Wide Opportunities on Organic Farms)

- Website linking volunteers/interns with organic farms and growers.

Municipal Plans

American Farmland Trust, *Erie County Farming on the Urban Edge*, (American Farmland Trust) Written by AFT

Town of Clinton, *Farmland Protection Plan - Draft*, (Clinton Open Space Committee, 2010)

Erie County Agricultural and Farmland Protection Plan, (Erie County Agricultural and Farmland Protection Board, 2012)

Town of North East Agricultural and Farmland Protection Plan (by Town of North East and American Farmland Trust, 2010)

Open Space Plan for Town of Red Hook, Villages of Red Hook and Tivoli, (Behan Planning Associates, 2000)

Virtual Food Hubs

New York Marketmaker

An interactive platform that seeks to foster business relationships between producers and consumers of food industry products and services.

Local Dirt

A national website connecting local sellers (farms, farmers markets, cooperatives) with buyers (individuals, businesses, distributors).

FarmersWeb

An online marketplace connecting buyers with local farms and producers.

List Your Harvest

An online marketplace where you can post or browse locally grown or made products currently available in your area; new (spring 2014).

Publications

American Farmland Trust, *Planning for Agriculture in New York: A toolkit for Towns and Counties* (Saratoga Springs, 2011)

This publication is a toolkit for those New York communities that recognize the importance of local farms and want to take action to support them. The Guide analyzes ways that towns have supported agriculture using tools such as right-to-farm laws, zoning codes, comprehensive plans, subdivision ordinances, property tax reduction programs, and purchase and transfer of development rights.

ACDS, LLC, *At a Crossroads: Agricultural Economic Development in the Hudson Valley.* (American Farmland Trust, 2004)

This resource examines how local governments, organizations, farmers and citizens can best act to strengthen the region's agricultural industry. The Report makes 13 recommendations related to strengthening the economic vitality of Valley farms.

Dutchess County Agricultural and Farmland Protection Board, *Dutchess County Agricultural and Farmland Protection Plan* (Duchess County Agricultural and Farmland Protection Board 1998)

Dutchess County Department of Planning & Economic Development, *Greenway Guide to Saving Farmland with Development,*

Mid Hudson Regional Sustainability Plan (Mid-Hudson Planning Consortium, 2013) Executive Summary

Seven objectives for Agriculture are noted and outline of strategies to achieve goals.

Glynwood, The State of Agriculture in the Hudson Valley, (Glynwood, 2010)

A compilation and summary of data from the Census of Agriculture for the Hudson Valley region.

New York Agricultural Landowner Guide: A Guide to Public Farmland Conservation Programs, (American Farmland Trust, 2010)

The Guide aims to help farmers and other farmland owners navigate the sometimes confusing array of public programs available to reduce taxes as well as steward and protect their land. This updated version identifies energy and environmental opportunities in a green economy and programs focused on enhancing farm viability.

Hudson Valley Agribusiness, *Understanding Food Systems: Identifying Business Opportunities for Hudson Valley Farmers and Food Entrepreneurs*

The Report aims to help business and community leaders become more fluent in the issues surrounding food systems while helping them to understand the differences and challenges in participating in the food system.

The Role of Food Hubs in Local Food Marketing, (USDA Rural Development, 2013)

This report details existing examples of "Food Hubs", models of integrating food production and added value production that benefit local economies.

NYS Small Business Development Center, Recipe for Success: Selling Food Products

This Business Planning Guide discusses many of the key considerations in bringing a home recipe to the marketplace. Topics include Business Plans, Financing, packaging, labeling and distribution.

Agriculture Supporting Community in the Mid-Hudson Region – Discussion brief #5, (Center for Research, Regional Education and Outreach, 2011)

This document reports on key statistics for mid-Hudson region farms and farming including farmland loss, rising agricultural revenues, the size of farms, the trend of small farms and # of organic farms increase, local marketing. The report focuses upon the nexus of small and local farms and the communities they serve.

Onondaga County - Municipal Reference for Agricultural Land Use Planning, (Cornell Cooperative Extension, 2002)

Securing Fresh, Local Food for New York City and the Hudson Valley, (Scenic Hudson, 2013)

This plan presents a strategic approach to conserving agricultural land. The plan focuses on farmland where it is most possible to reinforce the growing economic sustainability of regional agriculture. This is a strategic plan to conserve the agricultural lands within NYC's food shed.

Jim Strickler, *Farmland Preservation Project: Financial Capability Assessment for Columbia, Dutchess, Orange and Ulster Counties* (Scenic Hudson, 2013)

Yates County Agricultural and Farmland Protection Board, *Yates County Agricultural Planning Guide*

Transfer of Development Rights – Local Development Technical Series, (NYS Dept of State, 2010)