

Draft Plan
October
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Ulster County Agricultural and Farmland Protection Plan



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Chapter 1. Executive Summary

This Ulster County Agricultural and Farmland Protection Plan provides a comprehensive roadmap for sustaining and enhancing agriculture in Ulster County. The Plan is the result of a thorough and collaborative planning process that engaged a wide range of stakeholders, including farmers, landowners, local governments, agricultural organizations, and the community at large. The primary objective of this Plan is to address the challenges facing agriculture in the county while capitalizing on opportunities to ensure the economic viability, sustainability, and resilience of the agricultural sector.

Planning Process Overview

The Plan was developed through the following activities:

- 1. Advisory Committee Formation:** A Project Advisory Committee (PAC) comprising representatives from various county departments, agricultural organizations, and other stakeholders was formed to guide the planning process.
- 2. Public Engagement and Data Analysis:** The extensive process to solicit public input included focus group discussions, stakeholder interviews, and surveys of farmers, landowners, and residents. Agricultural Census data was collected and analyzed, and Geographic Information System (GIS) mapping was used to present information on farmland and agricultural land uses in Ulster County.
- 3. SWOT Analysis:** A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis was conducted to identify the critical factors influencing agriculture in the county, which served as the foundation for the Plan's recommendations.
- 4. Drafting and Refinement:** Based on the data analysis, public input, and guidance from the Project Advisory Committee, a draft plan was developed, reviewed, and refined before being released for public comment. Final revisions were made based on feedback from the public and stakeholders.
- 5. Final Adoption and Implementation Planning:** The Plan, which includes a clear framework for implementation and monitoring, is expected to be adopted by the Ulster County Legislature following a public hearing.

Overview of the Plan

The Ulster County Agricultural and Farmland Protection Plan is structured into several chapters, each addressing different aspects of the county's agricultural landscape. These chapters work together to provide a comprehensive strategy for sustaining and enhancing agriculture in Ulster County.

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Chapter 1. Executive Summary

The executive summary offers a brief overview of the Plan, including its purpose, the process undertaken to develop it, and the major recommendations. It is designed to give readers a quick snapshot of the Plan's goals and the strategic direction for agricultural and farmland protection in Ulster County.

Chapter 2. Purpose and Scope of This Plan

Chapter 2 explains the rationale behind updating the Agricultural and Farmland Protection Plan. It discusses New York State policies that support agricultural planning, how components of the Plan can be used, and the ongoing challenges and opportunities that necessitate a revised plan.

Chapter 3. Strengths, Weaknesses, Opportunities, and Threats (SWOT) Facing Agriculture

The SWOT analysis provides a detailed examination of the internal and external factors that impact agriculture in Ulster County. Based on the feedback received from farmers and other stakeholders during the planning process, it identifies:

- *Strengths:* Positive attributes and resources that support agriculture, such as market access, community support, and diverse agricultural products.
- *Weaknesses:* Internal challenges, including low profitability, high land and labor costs, and development pressure.
- *Opportunities:* External factors that could be leveraged to enhance agriculture, such as expanding agritourism, market expansion, and policy improvements.
- *Threats:* External risks and pressures, such as climate change, low commodity prices, and regulatory challenges.

Chapter 4. Vision and Goals for Enhancing Agriculture in Ulster County

This chapter presents the vision statement for the future of agriculture in Ulster County, along with specific goals designed to achieve that vision. The goals are organized around key themes such as economic viability, farmland protection, environmental sustainability, and community engagement. These goals serve as the foundation for the recommendations and strategies outlined in the subsequent sections.

Ulster County Agricultural and Farmland Protection Goals

- Ensure the profitability and resiliency of agricultural operations in Ulster County.
- Enhance agritourism while protecting community character.
- Foster the next generation of farmers.
- Identify and protect critical productive farmland areas.
- Reduce adverse farm/non-farm interactions.
- Enhance outreach to decision-makers to promote understanding of the role and needs of agriculture and local farm-friendly regulations.
- Promote and support environmental sustainability and enhance climate resiliency of farms.
- Enhance collaboration and communication among all parties including farmers, farmland owners, local and County governments, and agricultural service and advocacy agencies and organizations.
- Enhance educational programs that expand public understanding of the important role agriculture plays in the County.
- Enhance outreach and involvement to attract and support the needs of BIPOC, veteran, new, and young farmers.

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Chapter 5. Agricultural Economic Viability

Chapter 5 focuses on the economic aspects of agriculture in Ulster County, including current trends, issues, and opportunities. It provides an in-depth analysis of farm types and products, sales revenues, markets, production costs, and profitability. The section also includes specific goals and recommendations aimed at improving the economic viability of farms, such as expanding agritourism, enhancing marketing and promotion, increasing market access, and providing financial and technical assistance to farmers.

Chapter 6. Farmland Characteristics & Land Use Patterns

Chapter 6 examines the characteristics of farmland in Ulster County, including farm size, crops grown and livestock raised, soil quality, and land use patterns. It discusses the importance of protecting critical farmlands and the challenges posed by development pressure. The chapter provides recommendations for farmland protection, including the use of conservation easements, strategic land use planning, and the promotion of farm-friendly zoning policies.

Chapter 7. Resiliency and Sustainability

This chapter addresses the need for Ulster County farms to adapt to changing environmental conditions, particularly climate change. It outlines the trends and challenges related to sustainability, such as soil health, water conservation, and energy efficiency. The chapter also includes goals and strategies for enhancing the resilience of farms, promoting sustainable agricultural practices, and improving access to resources and technical assistance.

Chapter 8. Supportive Infrastructure

Chapter 8 highlights the importance of infrastructure in supporting agricultural operations. It discusses the current state of infrastructure related to processing, distribution, transportation, and farmworker housing. The section provides recommendations for improving and expanding this infrastructure, including the development of agricultural education programs, food hubs, cold storage facilities, and additional farmworker housing.

Chapter 9. Implementation

The Implementation chapter outlines the steps needed to put the Plan's recommendations into action. It details the roles and responsibilities of various stakeholders, including county agencies, agricultural organizations, and local governments. The section also discusses potential funding sources, strategies for securing resources, and a framework for monitoring and evaluating the progress of the Plan over time.

Appendices

The appendices of the Ulster County Agricultural and Farmland Protection Plan provide extensive supporting data, analyses, and resources that underpin the recommendations and strategies outlined in the main body of the Plan. It includes a series of series of Geographic Information System (GIS) maps that illustrate various aspects of farmland and agriculture in Ulster County, and summarizes the results of the surveys conducted as part of the planning process. Other materials in the appendices include lists of programs and resources available to assist farmers in Ulster County.

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Photo by Paul VanDerWerf

Paul VanDerWerf, Posted on Farm Bureau Website

Major Recommendations

The Plan makes several key recommendations aimed at enhancing the agricultural sector in Ulster County. These recommendations are organized into four primary themes:

Agricultural Economic Viability

- *Expand and Diversify Agritourism:* The Plan recommends expanding agritourism by offering workshops and training for farmers, developing farm-based hospitality options like farm stays, and enhancing marketing efforts. Strategies include promoting off-season activities and installing electric vehicle (EV) charging stations to attract more visitors.
- *Enhance Marketing and Promotion:* Recommendations include creating an Ulster County farms and food guide, developing a dedicated website for local farm products, and establishing agritourism trails to drive more traffic to local farms.
- *Support Farm Business Development, Expansion, and Diversification:* The Plan emphasizes the importance of supporting existing farms and cultivating the next generation of farmers through technical assistance, financial resources, and succession planning. This includes microgrants, bridge loans, and a County Revolving Loan Fund specifically for agricultural projects, as well as educational workshops and training.
- *Increase Access to Markets:* The Plan highlights specific opportunities for Ulster County farms to pursue a variety of retail, wholesale, and institutional markets and potentially increase their sales.

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Farmland Characteristics & Land Use Patterns

- *Protect Critical Farmland:* The Plan identifies priority areas for farmland protection and recommends using conservation easements, innovative land lease programs, and strategic land use planning to retain large contiguous blocks of farmland.
- *Promote Farm-Friendly Land Use Policies:* Recommendations include conducting farm-friendly audits of local zoning and subdivision laws to remove barriers to farming, promoting the adoption of farm-friendly policies, and aligning local regulations with New York State Agricultural Districts law.

Resiliency and Sustainability

- *Adapt to Climate Change:* The Plan highlights the need for farms to adopt sustainable practices that enhance resilience to climate change, such as soil health improvements, water conservation, and energy efficiency. It recommends providing technical assistance and resources to farmers to implement these practices.
- *Increase Access to Resources:* The Plan suggests enhancing access to educational programs, technical assistance, and mentorship opportunities for farmers, particularly those from underserved communities, including BIPOC and young farmers.

Supportive Infrastructure

- *Improve Processing and Distribution Infrastructure:* The Plan recommends exploring the feasibility of developing a food hub or cold storage facilities to help farmers access larger markets. It also suggests expanding meat processing facilities through partnerships with private entities.
- *Enhance Farmworker Housing:* Addressing the shortage of affordable, quality housing for farmworkers is critical. The Plan advocates for the development of more farmworker housing, for both seasonal and year-round employees.

Implementation Steps

To ensure the effective implementation of the Plan, several key steps are recommended:

- 1. Leadership and Coordination:** The Ulster County Agricultural and Farmland Protection Board (AFPB) and other agencies, such as the County Soil and Water Conservation District (SWCD) and Cornell Cooperative Extension (CCE), will take the lead in coordinating the implementation of the Plan's recommendations. Ongoing coordination of all agencies and organizations is recommended to promote collaboration.
- 2. Funding and Resources:** The Plan outlines potential funding sources, including state and federal grants, and recommends the creation of a County Revolving Loan Fund to support agricultural projects.
- 3. Monitoring and Evaluation:** A robust framework for monitoring and evaluating the progress of the Plan's implementation is proposed. This includes regular reporting,

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stakeholder engagement, and adjustments as needed to ensure the Plan's goals are met.

- 4. Public Engagement:** Ongoing public involvement is critical to the success of the Plan. The Plan recommends continued engagement with farmers, landowners, and the broader community to maintain support and adapt to changing needs.

Through these detailed recommendations and implementation steps, the Ulster County Agricultural and Farmland Protection Plan aims to create a vibrant, resilient agricultural sector that contributes to the county's economic health, environmental sustainability, and community well-being.



Chapter 2. Purpose and Scope of This Plan

New York State Policies That Support Planning for Agriculture

In 1992, the State adopted the Agricultural Protection Act, strengthening farmers’ right to farm. This Act placed greater scrutiny on state projects that could harm agriculture, and authorized the development of county farmland protection plans. Article 25-aaa of this act helps to sustain the farm economy and promotes local initiatives to protect agriculture and farmland in New York State. This section also authorized the creation of county-level Agriculture and Farmland Protection Boards (AFPB). These boards advise their county legislatures on actions that could impact farms located in county agricultural districts.

New York State legislation modified the agricultural protection programs (Article 25-aaa) in 2006 to authorize counties and local towns to develop agriculture and farmland protection plans (Section 324-a), further supporting farms. That amendment established the general requirements for these local plans. In addition to that legislation, the State established a funding program to assist local municipalities with in developing these plans. It is through this program and funding that Ulster County has developed the 2024 Ulster County Agricultural and Farmland Protection Plan.

State Requirements for Agricultural and Farmland Protection Plans

Local plans need to include identification of land areas proposed to be protected, to analyze the value of farming and farmlands to the agricultural economy, to identify the open space value(s) of farmland, to identify consequences of conversion of land away from farming, to evaluate the level of conversion pressure, and to describe recommended actions to promote continued agricultural use and protection of farmland in the County.

Why a New Agricultural and Farmland Protection Plan?

Predominantly rural, Ulster County is located two hours north of New York and an hour south of Albany. It encompasses part of Catskill State Park and is on the western shores of the Hudson River. It borders Greene County to the north, Delaware and Sullivan Counties to the west, Orange County to the south, and Dutchess County to the east. The County is 1,124 square miles and has a population of around 182,000. The County has one city, Kingston; 20 towns; and 3 villages.

Ulster County adopted its original Agricultural and Farmland Protection Plan in 1997. As stated in that Plan: “Agriculture has been a mainstay of Ulster County life throughout its proud history. Agriculture and its enterprises figure prominently on the Flag of Ulster County and for good reason. A major rationale for burning Kingston and surrounding areas in 1776 was that the British did not want quality and quantity of foodstuff available to aid the revolutionaries. The climate, soils, topography, location, and hardworking and knowledgeable workforce made Ulster County a good place to produce exceptional foods and fiber at that time.” Fortunately, that historical underpinning of agriculture and a cadre of hardworking and knowledgeable farmers in Ulster County remain today.

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The 1997 Plan also highlighted that “The high cost of farming, marginal returns on investment, lack of understanding of consumers and residents of farm practices and production, and pressure on good farmland for other uses have made farming in Ulster County an endangered endeavor.” It further discusses that there is “an impression that agriculture is a forgotten or underappreciated economic and human resource to the County.” Unfortunately, 27 years later, most of those conditions still exist and stress farmers and the agricultural economy.

The agricultural economy in New York State faces several stressors that affect farm sustainability and growth. These include land development pressure, such as suburban sprawl and rising land prices; economic and financial challenges, such as high production costs and fluctuating market prices; scarcity of labor, rising costs of labor, and lack of housing for farmworkers; environmental and climate challenges such as degradation of soil health, changing weather patterns, increased frequency of extreme weather such as droughts, floods and severe storms; regulatory pressures from a myriad of federal, state and local regulations related to land use, environmental protection, labor, and food safety; and national/international trade policies which impacts export opportunities and profitability. These same stressors face Ulster County farms.

At the same time, new emerging farming practices, technologies and equipment, new farming methods, and new crops and markets are supported by a local population that desires locally produced food and agricultural products. All of these are positive changes that Ulster County farmers can benefit from.

Addressing these stressors and emerging opportunities requires coordinated efforts from government, industry, and community stakeholders to create supportive policies, provide financial and technical assistance, and promote sustainable agricultural practices. This is the foundation of this Plan – to provide a roadmap for keeping agriculture strong in Ulster County.



Photo By Uliana Ahashkova

Agriculture also remains a priority sector in the Mid-Hudson Region. According to the 2023 Mid-Hudson Regional Economic Development Corporation (REDC) Strategic Plan:

Farming in all its forms – livestock, fruit and vegetables, maple syrup, grain, etc. and the emerging market for cannabis and hemp – remains a significant industry sector for the Mid-Hudson region, especially as metro-area markets continue to pay a premium for locally grown/raised ingredients.

Job-creating investments include processing facilities to create finished or value-added products [and] storage facilities to preserve food before it is sold to market... [Another strategy is to] support new opportunities for our region to act as the “foodshed” for the largest metro

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region in the United States by innovating ways to grow, harvest, and ship food year-round.¹

This Plan updates Ulster County’s original Agricultural and Farmland Protection Plan adopted in 1997. Given significant changes in farming types, locations, practices, climate, labor markets, food preferences, and land use trends that influence farming in Ulster County, an update was considered critical to enable the County, area farmers, and farm-related organizations and agencies so that programs and policies can be developed with the latest information, maps, and recommendations to enhance agriculture in Ulster County.

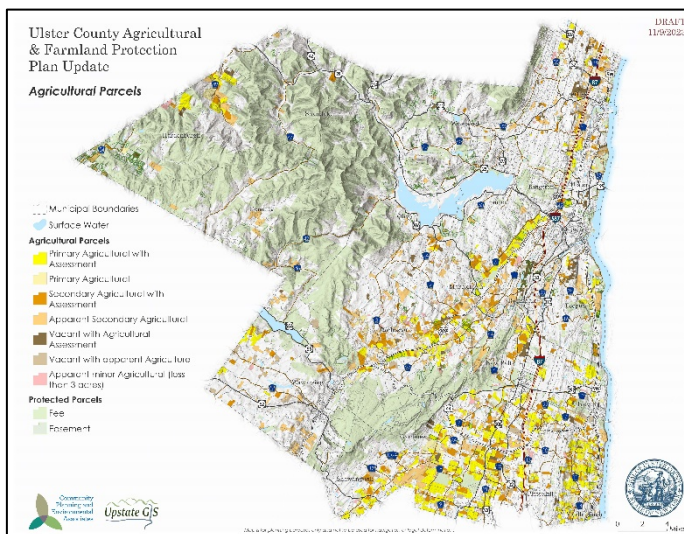
Components of this Plan

This Plan details and emphasizes agriculture’s importance to the local economy. It sets the stage for favorable opportunities to engage a range of community stakeholders, in addition to the many growers and producers themselves, to continue building support for local agriculture and achieve success in realizing the vision and goals for agriculture established by the County in this Plan.

The actions, strategies and policies recommended in this Plan aim to solidify and grow the agricultural economy, articulate priority projects, and provide the basis for protecting critical farmlands in the County. Priority programs can be implemented through the coordination of the farm community, agricultural service agencies, other organizations, and the towns, County and New York State governments.

Plan components include:

- Detailed maps. County staff along with the Ulster County Soil and Water Conservation District (SWCD), Cornell Cooperative Extension (CCE) Ulster County, the Ulster County Farm Bureau,



farm-related organizations, farmers, and towns can use the maps to understand where farming is taking place and how it relates to other land uses in the County. They illustrate the role agriculture plays locally. Towns can use the maps in their comprehensive planning and development of local policies. The Important Farmlands Map can be used at the town and county levels to help guide planning and decision-making to minimize the conversion of critical farmland. This map is also essential to farmers who wish to protect their land

¹ Mid-Hudson Regional Economic Development Council, *State of the Region: Mid-Hudson 2023 Strategic Plan*, p. 29, https://regionalcouncils.ny.gov/sites/default/files/2023-12/MHREDC_Strategic_Plan_2023.pdf

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through the New York State Farmland Protection Implementation Grants Program.

- A Farm Friendly Audit that can be used by towns to enhance their plans, zoning, and subdivision laws and ensure that barriers to agricultural land uses are minimized.
- Vision and Goals that all can use as guideposts in decision-making.
- Discussion of trends and issues facing agriculture. This discussion is organized around four main themes: Agricultural Economic Viability, Farmland Characteristics and Land Use Patterns, Resiliency and Sustainability, and Supportive Infrastructure. Each topic has a chapter (Chapters 5-8) that summarizes background information, trends and issues, goals, and recommended strategies.
- Actions and strategies for each of the four themes. These outline actions that can be implemented and offer details on what, how, and who should be involved to successfully launch or expand a program to further agriculture in the County.
- Supportive data, charts, tables, and statistics offered in appendices. These provide the factual groundwork for each of the four themes presented.
- A resource guide that identifies local, State, and federal resources that offer programs, funding and other support to farmers and those organizations and agencies.

Moving forward, the County, together with the Ulster County Agricultural and Farmland Protection Board, and the many agricultural organizations, agencies, and efforts taking place in the County and region, can take primary leadership to coordinate and implement the Plan. Agencies, especially the Ulster County SWCD, Planning and Economic Development departments and Cornell Cooperative Extension, can use it as a guidepost to develop new projects, training, and programs and seek funding needed to support those actions.



Hudson Valley Farm Hub

As the County and its partners implement programs to enhance agriculture, this Plan will be essential in future grant writing and will provide the foundational data, maps, and public input needed to fund future programs successfully.

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Overview of Planning Process and Methodology

Planning activities conducted in Ulster County to develop this Plan included the following steps:

1. Appointing a project advisory committee that includes County Planning, CCE Ulster County, CCE Eastern NY Commercial Horticulture Program, Ulster County SWCD, County Economic Development, and project consultants.
2. Hiring a consulting firm to assist.
3. Developing and analyzing farmer, farmland owner, and county resident surveys.
4. Facilitating six focus groups to understand strengths, weaknesses, and opportunities by specific topic. Focus groups included farm succession and land access, vegetable growers, fruit growers, agritourism and craft beverages, farmland preservation, and agricultural processing and distribution.
5. Facilitating twelve interviews with specific stakeholders representing various farm types and agricultural support agencies. These included representatives from the Kingston YMCA Project, USDA Farm Service Agency, CCE Eastern NY Commercial Horticulture Program, Hudson Valley Research Lab, New Jersey State Agricultural Development Committee, Ulster County SWCD, local farmers and food processor businesses, Cornell Cooperative Extension Ulster County, Harvest NY, Rondout Valley Growers Association, and the Hudson Valley AgriBusiness Development Corporation (HVADC).
6. Creating a Geographic Information System (GIS) database and maps showing farmlands, farmland soils, active farm operations, natural resources influencing farming such as streams, wetlands, and steep slopes, and other maps depicting development pressures. These maps help characterize farming and conditions in Ulster County.
7. Identifying and analyzing lands used for farm activities.
8. Conducting a farm-friendly audit for several towns in the County to understand how local zoning laws address agricultural land uses.
9. Analyzing all information collected to identify strengths, weaknesses, and opportunities related to agriculture in the County.
10. Presenting project status information to the Advisory Committee.
11. Preparing four interim reports to guide the development of the plan's vision, goals, and recommendations.

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12. Preparing a Draft Agricultural and Farmland Protection Plan based on Advisory Committee, staff and agency feedback, and consultant expertise.
13. Releasing the Draft Plan to the public for review and comment.
14. Submitting the Draft Plan to the Ulster County Agricultural and Farmland Protection Board (AFPB).
15. Referring the Draft Plan from the AFPB to the Ulster County Legislature.
16. Holding a public meeting about the Draft Plan.
17. Setting, issuing a notice for, and holding a public hearing by the Ulster County Legislature.
18. Editing the Draft Plan to create the Final Agricultural and Farmland Protection Plan.
19. Implementing an environmental evaluation required by SEQRA and adoption of the Ulster County Agricultural and Farmland Protection Plan by the County Legislature.
20. Referring the adopted Ulster County Agricultural and Farmland Protection Plan to the New York State Department of Agriculture and Markets.

Chapter 3. Strengths, Weaknesses, Opportunities, and Threats Facing Agriculture

A Strength, Weakness, Opportunities, and Threats (SWOT) analysis is a valuable way to organize and understand the large volume of information we have learned about agriculture, farmland, the agricultural economy, and the perspectives of farmers, landowners, and the public in Ulster County. This information is critical, as it serves as a foundation for the development of actions the County and its partners can take to maintain strengths, address weaknesses, take advantage of opportunities, and minimize threats.

This SWOT analysis provides a detailed overview of Ulster County’s current agricultural landscape, outlining the internal and external factors that affect its growth and sustainability. It underscores the need for strategic planning, community support, and adaptation to change to ensure the protection and development of the county's farmland and agricultural industry.

Summary of Strengths, Weaknesses, Opportunities and Threats

A great deal of information was learned throughout the planning process. Each theme presented in subsequent chapters of this Plan provides a more detailed discussion of theme-related strengths, weaknesses, opportunities and threats. The following list is based on a compilation of public input (surveys, focus groups, interviews, and Advisory Committee input), mapping, data collection and data analysis. This gives an overall picture of the status of agriculture in the County and informs the county-wide vision and goals established in this Plan to enhance the farm economy in the future.

Based on the work conducted throughout the planning process, the following summarizes identified agricultural strengths, weaknesses, opportunities, and threats facing agriculture in Ulster County.

Strengths of Agriculture in Ulster County

- **Market Access:** The Hudson Valley, New York City, and northern New Jersey markets and large retailers are easily accessible.
- **Agritourism:** Ulster County is a hub for agritourism, with farm-related activities, “pick-your-own” operations, and direct sales of agricultural products, as well as a large captive audience.
- **Diverse Agriculture:** Although the apple industry remains the dominant agricultural activity, the County has a variety of crops and commodities and a robust craft beverage industry.
- **Community Support:** Ulster County benefits from significant public support for agriculture; people value locally-grown foods and farms.

Strengths:
Resources, features, elements, or capabilities that make agriculture successful.

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- **Organizational Support:** Farmers in Ulster County have access to numerous organizations that offer educational, technical, and financial assistance.
- **Demographic Trends:** Ulster County has experienced an influx of New York City residents with disposable income, especially since the start of the COVID-19 pandemic. There has been increased diversity among farmers, including more women, people of color, and younger farmers.
- **Climate and Soils:** The climate and soils in Ulster County provide excellent growing conditions.
- **Critical Mass of Producers:** The County has a wealth of farms, including legacy growers that have operated for generations.

Weaknesses and Challenges Facing Agriculture in Ulster County

- **Low Profitability:** Land costs are high, and coupled with poor commodity prices and the rising cost of agricultural inputs (e.g., seed, fertilizer) and equipment, farming is not very profitable overall.

Weaknesses/Challenges:

Internal deficiencies in resources, elements or capabilities that prevent agriculture from being more profitable, resilient, and successful.

- **High Labor Costs:** Many agricultural operations in the County, such as fruit orchards, are labor-intensive and depend on the availability of skilled farm workers. The cost of labor, however, has increased due to regulatory changes at the state level and inflation.
- **Shortage of Farm Worker Housing:** There is not enough quality housing for farm workers, whether they are seasonal or year-round employees. Farmers and workers often cannot afford to live in Ulster County.
- **Conflicts with Non-Farm Neighbors:** As more land is purchased for non-agricultural uses, conflicts with adjacent property owners who do not understand farming practices have increased. People of color involved in farming face additional challenges, such as harassment and discrimination.
- **No Concerted Effort to Protect Farmland:** Ulster County does not have a formal farmland protection program, and local land trusts have focused primarily on preserving open space rather than on land that is actively farmed.
- **Limited Infrastructure:** Ulster County has limited processing and co-packing facilities that can add value to local agricultural products. Additional lodging is needed to support the expansion of agritourism.

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- **Regulatory Barriers:** Land use and zoning regulations in some communities restrict farm-related activities and are not farm-friendly.
- **Development Pressure:** Non-farm uses (mostly residential) have encroached upon farmed areas, and some farmland has been lost to solar facility development. As more land is fragmented by residential development, more conflicts between residents and farmers may occur.

Opportunities to Enhance Agriculture in Ulster County

- **Support Programs:** Increased technical assistance and financial support for existing and new farmers, including programs to reduce the costs of farming and land access, farm succession planning, and assistance with grant writing.

Opportunities:
Programs, actions, strategies, policies, or capital improvements that affect agriculture in a positive way to promote profitability, resiliency, and long-term success.

- **Agritourism Expansion:** Diversified agritourism activities, development of farm-based hospitality, increased marketing and promotion, and farm tours for groups, among other strategies.
- **Educational Enhancements:** Diversity training, education about farming for communities, additional farm-to-school activities, model lease agreements for landowners who rent to farmers, and information on adapting to climate change.
- **Policy Improvements:** Promoting more farm-friendly land use regulations and zoning to allow the development of farmworker housing and value-added activity.
- **Market Expansion:** Promoting new crops, craft beverages, and online sales to expand market reach; cold storage and processing facilities; additional opportunities for direct-to-consumer and institutional sales.



Photo by Uliana Ahashkova

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Threats Facing Agriculture in Ulster County

- Continued land development and encroachment.
- Climate change and its adverse impacts on agriculture.
- Low commodity prices.
- Constant need to adapt to changing consumer preferences.
- National and global competition.
- The impact of taxes and government regulations on farm profitability.

Threats:

Major factors from outside Ulster County that prevent agriculture from being sustainable and resilient. These external factors are often out of the direct control of county or municipal government. There may be overlap between weaknesses and threats.

Each subsequent chapter details specific trends, challenges, and opportunities. The following sections provide more information on topic-specific strengths, advantages, weaknesses, and challenges facing farms in Ulster County. This detailed information supports the vision, goals, and recommended strategies found in later sections of the Plan.



Chapter 4. Vision and Goals for Enhancing Agriculture in Ulster County

What is a Vision Statement?

A vision statement is a key component of an agriculture and farmland protection plan for several reasons. The Vision Statement provides a foundation for the following:

1. **Guides Strategic Planning:** It provides a clear, overarching direction that helps to shape and guide the strategic planning process. This ensures all efforts and initiatives align with a long-term vision for Ulster County's agricultural and farmland future.
2. **Sets Priorities:** An articulated vision helps to prioritize actions and allocate resources effectively. It highlights what is most important for the community, ensuring that the most critical issues receive attention and funding.
3. **Inspires and Unites Stakeholders:** A compelling vision can inspire and unite farmers, policymakers, residents, and other stakeholders around a common direction. It fosters collaboration and encourages collective action toward shared objectives. A well-defined vision can attract support from government agencies, non-profit organizations, and private investors.
4. **Provides a Framework for Decision-Making:** It offers a framework for making consistent and informed decisions. When faced with choices about land use, development, and conservation, the vision statement serves as a reference point to evaluate whether potential actions align with long-term goals.
5. **Enhances Accountability:** A vision statement enhances accountability by establishing clear expectations. It provides benchmarks against which progress can be measured, ensuring that efforts are on track and adjustments can be made as needed.
6. **Addresses Community Values and Needs:** It reflects the community's values, aspirations, and needs. This ensures that the plan is relevant and responsive to local conditions, fostering greater buy-in and support from the community.

Ulster County's Vision for Agriculture

Our vision for Ulster County is to foster a thriving, resilient, and sustainable agricultural community that honors our rich agricultural heritage while embracing innovative practices for future growth.

We envision a county where:

1. Agricultural operations are economically viable and profitable, with diversified income streams, robust support for agritourism, value-added production, and direct-to-consumer sales. Farmers can access the resources, markets, and financial tools necessary to sustain

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and grow their businesses.

2. Agricultural land is accessible and protected through strategic land use planning, conservation easements, and innovative land lease programs. Large contiguous blocks of farmland are retained, fragmentation is reduced, and long-term stability for farm operations is ensured.
3. Farming practices are adapted to enhance resilience to climate change with sustainable practices that build healthy soil, conserve water and biodiversity, and increase energy efficiency and renewable energy use.
4. Farmers from all segments of the agriculture community, including those from legacy farms, young, beginning, and BIPOC farmers, have access to comprehensive educational programs, technical assistance, mentorships, and resources to improve their skills, knowledge, and operations and facilitate their success in agriculture. Programs that foster agricultural literacy among the public and build stronger connections between farmers and the community are prioritized.
5. There is a strong partnership between farmers, local governments, educational institutions, and community organizations to create a supportive policy environment, and promote agricultural-friendly zoning and land use practices without placing undue restrictions on farming operations.
6. Ulster County embraces innovation in agricultural practices, technologies, and marketing strategies. Research and development initiatives that advance the agricultural sector and enhance the competitiveness of our local farmers in a global market are supported.
7. The cultural heritage of farming in Ulster County is celebrated and preserved, recognizing the integral role agriculture plays in our community's identity, economy, and landscape. Agritourism and educational programs highlight the historical and contemporary significance of farming in the region, and robust research and community engagement establish the pathway for agriculture to expand and succeed in the future.

What are Goals?

Specific goal statements are crucial to implementing the vision established above because they provide clear, actionable steps toward achieving the broader vision. These goal statements provide a structured approach to implementing the vision by breaking it down into specific, measurable, achievable, relevant, and time-bound (SMART) objectives. This helps to ensure that progress can be tracked and that the vision for agricultural and farmland protection can be effectively realized.

Goals set direction through such words as *increase*, *promote*, *enhance*, and *strengthen*. To further Ulster County's vision, goals related to economic viability, land protection, environmental stewardship, education and community awareness, policy, and infrastructure needed to support agriculture have been established. Later chapters of this Plan take the direction indicated by the

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goals one step further to identifying priority actions and strategies that, when implemented, will help Ulster County attain its vision and goals.



Ulster County Agricultural and Farmland Protection Goals

The goals to enhance agriculture are:

- Ensure the profitability and resiliency of agricultural operations in Ulster County.
- Enhance agritourism while protecting community character.
- Foster the next generation of farmers.
- Identify and protect critical productive farmland areas.
- Reduce adverse farm/non-farm interactions.
- Enhance outreach to decision-makers to promote understanding of the role and needs of agriculture and local farm-friendly regulations.
- Promote and support environmental sustainability and enhance the climate resiliency of farms.

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- Enhance collaboration and communication among all parties, including farmers, farmland owners, local and County governments, and agricultural service and advocacy agencies and organizations.
- Enhance educational programs that expand public understanding of the important role agriculture plays in the County.
- Enhance outreach and involvement to attract and support the needs of BIPOC, veteran, new, and young farmers.



Cornell Small Farms

Chapter 5. Agricultural Economic Viability

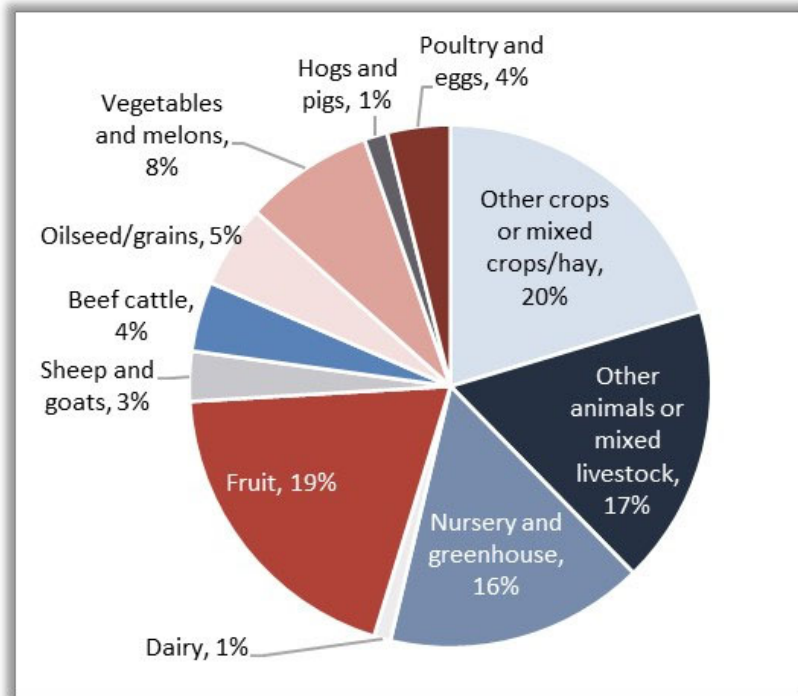
Background

A technical report on the agricultural economy in Ulster County was produced as part of the development of the Plan. The full report, Economic Viability Data and Analysis, is presented in Appendix 2. The report is based primarily on an analysis of data from the Census of Agriculture, conducted every five years by the U.S. Department of Agriculture (USDA). It describes the markets served by agricultural producers and evaluates the strengths and weaknesses of the County’s agricultural sector according to factors such as sales, production costs, farm income, and profitability. The section below highlights many of the trends and issues identified in that report.

Trends and Issues

Positive Trends

A Variety of Farm Operations and Products. Farms in Ulster County reflect a diverse array of agricultural operations and activities. More than 30 different crops are grown, and there are well over 5,000 farm animals. The USDA classifies agricultural producers such as farms, orchards, and greenhouses by *principal product* – the crop or animal that accounts for at least 50% of the establishment’s agricultural production. Not all farms, however, produce a single group of crops or livestock.



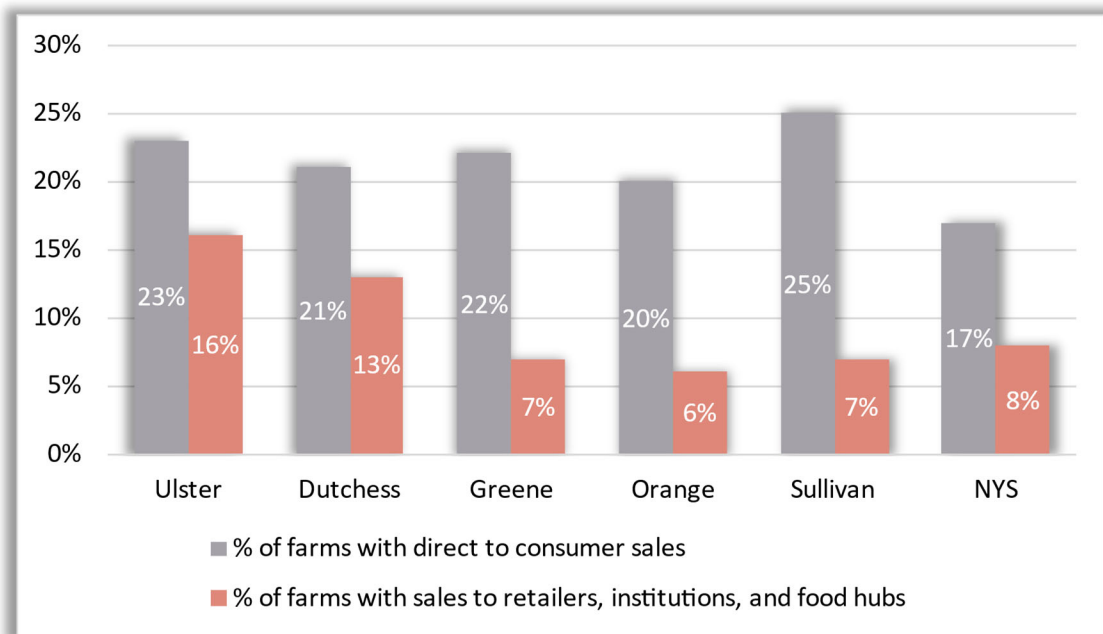
According to the USDA, farms that cultivate a combination of crops or raise a combination of animals comprise nearly 40% of the agricultural establishments in Ulster County. The remaining farms produce a single group of crops or livestock; the most common are fruit growers, including orchards (19%); nursery and greenhouse operations that grow plants, flowers, and nursery stock (16%); and vegetable farms (8%).

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The Continued Importance of Fruit Production. Ulster County has long been a major producer of fruits and berries. Orchards where apples and other tree fruit are grown cover more than 8,600 acres of land. Although the amount of land in orchards has declined 42% since 1969, sales of fruit have increased dramatically, from approximately \$28.0 million, adjusted for inflation, in 2002 to \$74.6 million in 2022. Ulster County ranks #2 (after Wayne County) in New York State in the sales of fruits and berries and #3 (after the counties of Wayne and Chautauqua) in the number of orchards and land in orchards.

A 2018 study by a group of Cornell University economists found that the apple industry supply chain in New York State has strong multiplier effects; for every dollar generated in the apple industry, \$0.58 is generated in backward-linked (non-apple) industries, including wholesale trade, manufacturing, and transportation and warehousing.² If the state multiplier is applied to Ulster County, the economic contribution of the local apple industry grows from \$74.6 million to an estimated \$117.9 million.

Growth In Average Sales Per Farm. The average market value of agricultural products sold by Ulster County farms in 2022 was \$217,720, a 104% increase in inflation-adjusted dollars compared with twenty years earlier. Moreover, average sales among farms selling fruits and berries, cultivated Christmas trees, and horses and ponies were higher in the County than they were statewide.



High Levels of Direct Sales to Consumers, Retail Stores, Institutions, And Wholesalers. Ulster County has a relatively high level of direct-to-consumer sales: 23% of farms in the County, compared to 17% statewide, sell agricultural products directly to consumers at farm stands, on-

² Todd M. Schmit, Roberta M. Severson, Jesse Strzok, and Jose Barros, "Economic Contributions of the Apple Industry Supply Chain in New York State," Charles H. Dyson School of Applied Economics and Management, Cornell University, March 2018.

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farm markets, and farmers' markets, Among the neighboring counties of Dutchess, Greene, Orange, and Sullivan, only Sullivan County has a higher share of farms selling directly to consumers (25%). On average, farms in Ulster County earn about \$95,000 per year in direct-to-consumer sales, well above the average for farms statewide (\$54,584). The high level of direct sales may be due to resident support for local agriculture, the strength of the tourism industry, and the many venues for selling food and farm products in Ulster County.

The County also stands out in terms of sales to so-called intermediate markets. According to the 2022 Census of Agriculture, approximately 16% of Ulster County farms sell to retail stores, institutions, and wholesalers, twice the state average of 8%. The value of food products sold by these farms averages over \$409,000 annually, significantly higher than in neighboring counties and New York State (\$234,000).

Above-Average Revenues from Agritourism, Combined with Increased Tourism Spending in Ulster County. Ulster County has consistently had a higher proportion of farms involved in agritourism as well as higher average revenues from agritourism than New York State. In 2022, the Census of Agriculture reported that 6% of farms in the County earned income through agritourism and recreational services, twice the share of farms statewide. These farms generated approximately \$117,000 in annual sales in Ulster County, compared to about \$59,000 statewide and \$96,000 in Orange County, the highest of neighboring counties. It should be noted that the USDA uses a relatively limited definition of agritourism that does not include picking your own apples or shopping for fresh vegetables at farm stands, both of which are generally considered agritourism activities.

Agritourism is only one element of the tourism industry in Ulster County, which also features opportunities for outdoor recreation, the arts, historic sites, and more. Visitor spending in the County grew to an estimated \$979 million in 2022, reaching 143% of 2019 (pre-pandemic) levels.³

Farm-Based Craft Beverage Producers. Ulster County has 70 breweries, cideries, distilleries, and wineries, two-thirds of which are farm-based and licensed by the NYS Liquor Authority. These businesses generate revenue through value-added production and tourism, supplementing the income earned by farms from the sale of agricultural products. In some cases, they also serve as gathering spaces and venues for special events.

Approximately 12% of farms in Ulster County produce and sell processed or value-added products, according to the Census of Agriculture, compared to 7% of farms statewide. At about \$160,000 per year, average sales of value-added products in the County are below the state average of \$172,000 but are considerably higher than in neighboring counties. Many of the highest average sales of value-added products within the state are in counties in western New York and the Finger Lakes with large numbers of wineries.

A Growing Number of Young Farmers. Continuing the long-term trend of aging among producers, Ulster County farmers have an average age of 57.8 years, up from 56.5 in 2017; the state and

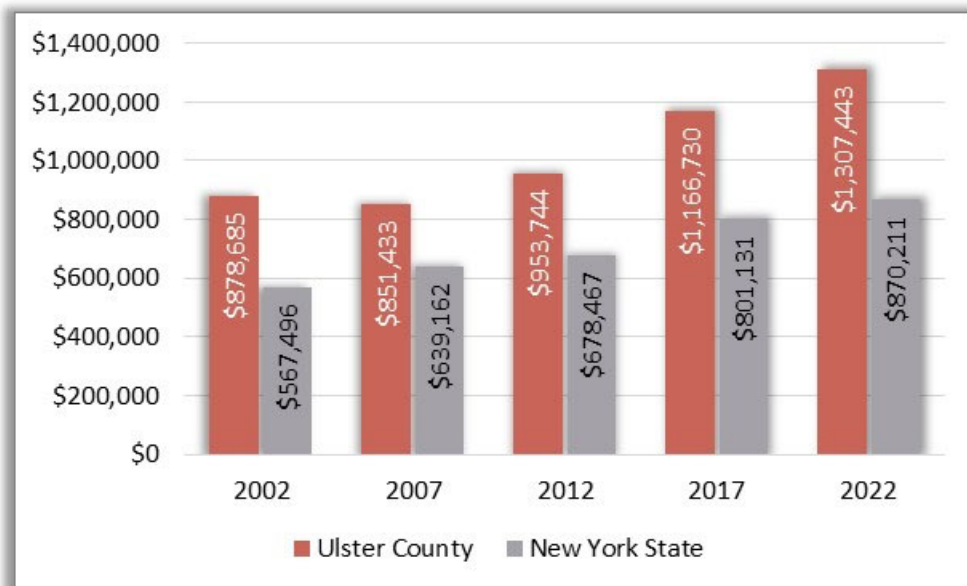
³ Tourism Economics, *Economic Impact of Visitors in New York 2022: Catskills Focus*, September 2023.

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national averages are 56.7 and 58.1 years, respectively. However, 8% of farms have at least one producer under age 35 (there can be up to four producers per farm), and they manage 28% of the farm acreage. This suggests that they are farming with more experienced and/or older producers. The County has also had an increase in younger (though not the youngest) farmers: 17% are ages 35 to 44, up from 10% in 2017.

Appreciation In Farm Real Estate Values. Real estate is typically the largest single component of a farm’s total assets. In addition to serving as a source of wealth, real estate serves as the principal source of collateral for farm loans. It also impacts the landowner’s return on investment and their ability to get a good price if they decide to sell the property.

The total market value of farm real estate in Ulster County in 2022 was estimated at \$635.4 million. The average farm had a market value of \$1.3 million, well above the statewide average of \$870,000. In the last twenty years, the market value per farm has been consistently higher in the County than in the State.



The differences are even more pronounced when looking at farm real estate values on a *per-acre* rather than a per-farm basis. Farm real estate in Ulster County averaged \$8,701 per acre in 2022, more than twice the state average of \$4,102. Moreover, when the dollar amounts are adjusted for inflation, the average value per acre rose faster in Ulster County – 55% – compared to 46% in the State.

A Large Agricultural Workforce. Ulster County ranks #4 of all counties in New York in terms of the size of its agricultural workforce. Approximately 36% of all farms in the County had hired labor, including paid family members, who contributed to agricultural operations in 2022. These farms employed more than 1,800 people, a 53% increase from the number in 2002.

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Issues and Challenges

The Cost of Farmland.

The high land values that benefit existing property owners in Ulster County can be detrimental to producers who lease farmland, beginning farmers, and farmers looking to expand. Appreciation in farm real estate values often reflects rising land prices overall, which may be the result of development pressure and competition with other land uses such as housing.



An analysis of real estate sales in Ulster County from 2014 through 2023 identified a median selling price of approximately \$10,000 per acre of land classified as Agricultural. This does not account for other types of property that may be utilized for farming. Nevertheless, in a county that is experiencing a growing demand for residential property, finding affordable, productive farmland has been identified as a challenge.

Fewer Acres in Vegetable Production. Despite the apparent demand among consumers for locally grown food products, Ulster County experienced a steady reduction in the number of acres devoted to vegetable production between 2002 and 2022, with a net loss of 62%. Among the vegetables with fewer acres in production were broccoli, cabbage, bell peppers, potatoes, pumpkins, and sweet corn.

Fewer Livestock Farms. Overall, Ulster County has fewer farms with livestock than it did in the past, and there are very few dairy farms left. Virtually all types of livestock and poultry except ducks experienced a net reduction in head between 2002 and 2022. New farmers tend to grow fruits, vegetables, or cut flowers rather than raise large animals, which may involve higher costs.

Above-Average Production Costs Per Farm. Average farm production costs are about 13% higher in Ulster County (\$232,430) than in the State (\$201,523). They are also much higher than in neighboring counties, where average costs range from \$85,558 in Sullivan County to \$159,379 in Orange County. The largest expense is for hired labor (see below), followed by repair and maintenance costs associated with farm equipment and machinery. The high production costs in Ulster County are mainly attributable to agricultural chemicals, including herbicides and fungicides used by apple orchards, and contract labor.

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Rising Cost of Labor. Many of the farm operators who participated in interviews and focus groups cited the rising cost of labor as a major issue. Between 2002 and 2022, the average annual payroll for hired farm workers in Ulster County, in inflation-adjusted dollars, increased by nearly 65%. New York State has increased the minimum wage to \$15 per hour – twice the federal minimum wage paid to farmworkers in other states – and made some farm workers eligible for overtime pay at 1.5 times their regular pay rate.

Market Concentration. Most of the market value of agricultural products sold is generated by a relatively small number of farms. In 2022, 103 farms in Ulster County, or 21% of the producers, accounted for 95% of the sales. Each of these farms had sales in excess of \$250,000 per year. Conversely, 48% of the farms had sales of less than \$10,000 per year, generating a mere 0.5% of total sales.

Low Net Cash Income and Profitability. Used as a broad measure of profitability, net cash farm income in Ulster County totaled \$8.6 million in 2022. This figure has fluctuated over the last twenty years, reaching a high of \$14.3 million (or \$20.3 million in inflation-adjusted dollars) in 2007. The average net income realized by farm operations in Ulster County was \$17,786, about one-quarter of the State average of \$76,781. It was also lower than in all neighboring counties except Sullivan, where the net income figure was negative. Only 35% of the farms in the County earned a profit in 2022, below the state average of 40%.

Majority of Farmers Aged 65 And Over. More farmers aged 65 and over than those under age 35. Although Ulster County has an increasing number of young farmers, there are more than five times as many farmers aged 65 and over as those under age 35. This highlights the need for more succession planning to keep farmland in production in the future.

Agricultural Economic Viability Goals

The following goals directly address agricultural viability.

- Increase the profitability and resiliency of agricultural operations in Ulster County.
- Enhance agritourism while protecting community character.
- Support farm succession planning while fostering the next generation of farmers.

Economic Viability Recommendations

The following recommendations are designed to address opportunities and challenges related to **enhancing the economic viability of farms and orchards** in Ulster County. These are derived from public input, the Advisory Committee, and team consultants.

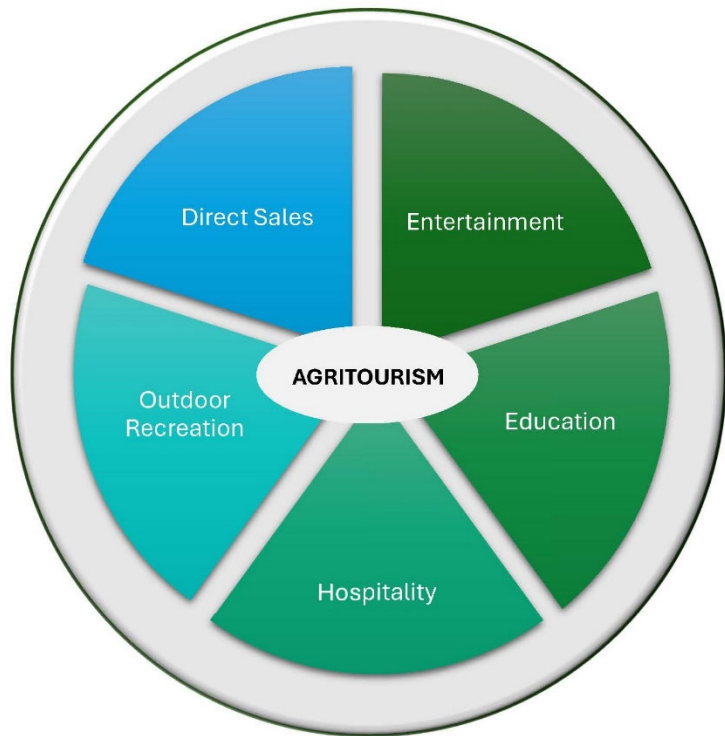
Those items identified as a priority strategy or action are identified with this icon and are further detailed in Chapter 9.



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1. Expand and diversify agritourism opportunities.

Agritourism is critical to the future vitality of the agricultural sector in Ulster County. As illustrated in the diagram at right, agritourism activities generally fall into one of five major categories: direct sales, entertainment, hospitality, education, and outdoor recreation. Ulster County is very strong in the direct sales category; there are numerous farms where customers can purchase agricultural products at farmstands and on-site markets or pick their own apples and pumpkins. Farm-based entertainment, including hayrides, harvest festivals, and corn mazes, is also available. In contrast, relatively few farms offer farmstays or host educational workshops where people can learn about local foods, animals, farming practices, and other subjects. This presents an opportunity to expand the range of agritourism activities in the County and engage new audiences.



A 2015 white paper by the Glynwood Center advocates for a new form of agritourism in the Hudson Valley that is “an entrepreneurial mix of hospitality, education and agriculture” and that offers a more hands-on experience.⁴ This approach would address the growing demand among travelers today for authentic and meaningful experiences. It would also help to promote the region as a place whose identity is grounded in agriculture and food production.

Recommended strategies for expanding and diversifying agritourism in Ulster County include:

- Continue to offer agritourism workshops, networking events, and training programs through Cornell Cooperative Extension Ulster County, the Cornell Agritourism Program Work Team, and other organizations.
- Educate farmers and farm business owners about the Ulster County tourism market and potential agritourism opportunities through written materials, workshops, and meetings.

⁴ Glynwood Center for Regional Food and Farming, “From ‘Agri-tainment’ to Engagement: A New Era of Agritourism for the Hudson Valley,” 2015, p. 3.

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- Encourage the development of farm-based hospitality, including overnight farm stays, bed-and-breakfasts, and culinary experiences. These opportunities are particularly important in areas that are not well-served by hotels, motels, and restaurants.
- Offer direct technical assistance to farmers and farm business owners. Farmers often need one-on-one support to help them fully develop their agritourism venture, especially in such areas as marketing, financing, liability and insurance, and compliance with municipal, state, and federal regulations.
- Develop off-season agritourism opportunities. Agritourism activities tend to be seasonal and dependent on weather conditions. Events like the Hudson Valley Agritourism Networking Session hosted by Cornell Cooperative Extension in June 2024 involve farmers, farm business owners, and tourism industry professionals in brainstorming ideas for activities during the winter and early spring. These could include, for instance, more culinary events and tastings.
- Consider installing EV charging stations on or near farms to serve visitors.

2. Enhance marketing and promotion of agritourism (and local farm products).

Another critical aspect of agritourism that should be addressed is marketing. From a tourism perspective, Ulster County benefits from its proximity to population centers and easy access via the New York State Thruway and other major roadways. It also benefits from the significant interest in local farm products among residents. Consequently, while some elements of the marketing program will be aimed at driving visitation to the area, others will focus on raising public awareness of agriculture and the availability of farm products within the County. Recommended strategies for enhancing the marketing and promotion of agritourism and farm products in Ulster County include:

- Develop an Ulster County farms and food guide with a map to promote local agricultural products and places to purchase them. Many counties have produced these publications with high-quality layouts and designs and made them available in print and/or online. As this Plan was being completed, CCE Ulster announced a new initiative to develop the Ulster County Fresh & Local Guide. Aimed at supporting local farms, the guide will be prominently featured on the CCE Ulster website. The information in the guide should be updated at least annually.



- Create a website or a series of pages on the Ulster County website dedicated to promoting local farms. Online information on farms and farm products in the County is scattered across multiple sites. In addition to the websites of individual farms and orchards, it can be found on sites associated with public agencies (e.g., County Planning),



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organizations that support agriculture (e.g., Cornell Cooperative Extension, Rondout Valley Growers Association), tourism agencies, and others. Although these sites are generally high quality, a discrete website could serve all farms, including small farm operations that, for whatever reason, do not have an online presence or are not listed on other sites. Additionally, it would raise the profile of the County's agricultural sector.

- Establish and promote a series of agritourism "trails" in the County. Farm, food, and beverage trails provide instant itineraries for visitors and serve as a form of cooperative marketing. Although they are not specifically highlighted on the Ulster County Tourism website, the Taste NY program website lists cuisine and craft beverage trails across New York State,⁵ three of them in Ulster County: the Hudson Valley Apple Trail, the Meet Me in



Marlborough Farm Trail, and the Shawangunk Wine Trail. Both the Marlborough Farm Trail and the Shawangunk Wine Trail have high-quality websites as well as an active social media presence. It is unclear whether the Hudson Valley Apple Trail is being actively promoted, however; the last post on its Facebook page is from 2020. This is a missed opportunity to drive traffic to Ulster County's orchards and increase public awareness of the apple industry. These trails deserve

wider exposure and could be promoted more effectively via the Ulster County Tourism website, a website specifically devoted to Ulster County agriculture, and/or the Ulster County Farms and Food Guide described above. Additional trails featuring farms, as well as farm-to-table restaurants and retail stores that sell local and regional food products, could be established in other areas of the County.

- Create and promote agritourism opportunities suitable for and targeted to small groups such as bike clubs and tour companies. With multiple rail trails and beautiful scenery, Ulster County has become a popular destination for cyclists. A blog post on the website of Ulster County Tourism highlights what it calls "Bikes & Brews" tours, with lists of bike paths, popular breweries, and music venues as well as links to bike rental companies. This is a great way to connect visitors with local attractions. Similarly, Ulster County Tourism could post suggested travel itineraries that incorporate visits to local farms, orchards, and farm-to-table restaurants that can accommodate small tour groups. Alternatively, it could work with tour companies to create agriculture-related itineraries that are appropriate for their customers.

⁵ <https://taste.ny.gov/cuisine-and-beverage-trails>

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- Develop a marketing campaign focused on the County’s 70 craft beverage producers. Ulster County has more breweries, cideries, distilleries, and wineries, including farm-based producers, than any of its neighbors. This is worth recognizing and promoting through effective marketing, branding, cooperative advertising, and the establishment of a craft beverage trail. Use creative approaches to highlight craft beverage producers. A bill that would allow cideries and distilleries to ship their products out of state – as breweries and wineries already do – was signed into law by Governor Kathy Hochul in August 2024. The legislation is expected to broaden the market for these products.



Chronogram 2023 Map of Hudson Valley Craft Beverage Producers,

<https://www.chronogram.com/food-drink/2023-map-of-hudson-valley-craft-beverage-producers-18019501>

- Continue to offer educational workshops and training programs for farmers and farm business owners, through CCE Ulster and other organizations, on marketing strategies. The results of the Ulster County Agriculture Survey suggest that the more profitable farms use multiple marketing tools (e.g., roadside signage, flyers, individual and cooperative advertising, social media, e-mail) and are more likely to have a website than less profitable farms. For small farms that sell directly to the public, marketing is essential to bring in customers.
- Increase marketing of agritourism and craft beverages in the New York-New Jersey metropolitan area by advertising on MetroNorth and other commuter trains.

3. Provide financial and technical assistance, agricultural education, and training to farmers and farm business owners.

Support is needed to help farmers navigate and access the resources necessary to facilitate farm business development and expansion, expand and diversify their operations, and/or engage in succession planning. Financial and technical resources should also be directed towards cultivating the next generation of farmers. Recommended strategies include the following:

- Refer farms and food businesses to Hudson Valley AgriBusiness Development Corporation (HVADC) for business technical assistance and access to capital as appropriate. (See Chapter 9 regarding continuing funding and support for HVADC.)

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- Direct farmers to Cornell Cooperative Extension, NY FarmNet, and the Ulster County Small Business Development Center for business technical assistance.
- Offer microgrants of up to \$10,000 and bridge loans to help farmers transition to new crops, livestock, and/or markets and purchase the equipment needed to grow or diversify.
- Create a County Revolving Loan Fund to provide loans for farm expansion and diversification projects. Because these projects rarely create employment, establishing a new and separate loan fund specifically for agricultural projects, using sources that do not require job creation, is critical. 
- Work with the National Young Farmers Coalition, Kingston Land Trust – Land in Black Hands, the Black Farmers Fund, Glynwood Center, CCE Ulster, and other organizations to attract, train, and provide financial and technical assistance to aspiring farmers from historically underserved populations.
- Continue to offer educational workshops and training programs for farmers and farm business owners, through CCE Ulster and other organizations, on topics including but not limited to:
 - Farm business planning
 - New technologies in farming (e.g., robotics, mechanization)
 - Selling through multiple marketing channels
 - Selling products online
 - Selling to schools and other institutions
 - Developing and marketing value-added products
- Continue to evaluate and promote, as appropriate, new crops, livestock, markets, and agricultural technologies through CCE Ulster, CCE Eastern NY Commercial Horticulture Program, Hudson Valley Research Lab, Ulster County SWCD, and other organizations.
- Increase the participation and involvement of Ulster County farms and orchards, as appropriate, in the New York Grown and Certified program and the Taste NY program to meet consumer demand for high-quality agricultural products.



Photo by Jim Schoonmaker, Wrights Farm

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4. Increase access to specific markets.

Opportunities exist for farms in Ulster County to pursue new or additional market channels and potentially increase their sales. Diversifying markets is one way to reduce reliance on a single customer base. To facilitate market access, the following strategies are recommended:

- Research state, county, and municipal procurement policies and seek to establish farm-friendly procurement goals for Ulster County agencies and institutions. To signify its support for local agriculture, the County could require its departments to procure a set percentage (e.g., 20%) or dollar amount of their food purchases from farms and orchards in Ulster County.
- Work with Farm to Institution New York State, an initiative led by American Farmland Trust, to educate institutions about buying locally. The organization offers a Local Food Buyer Toolkit that can be used to help institutions expand their purchases of local food products. Training and resources for farmers on selling to institutions are available through Cornell Cooperative Extension.
- Evaluate the potential for the sales of farm products to institutions in Ulster County, including K-12 schools, Ulster Community College, SUNY Paltz, correctional facilities, hospitals, nursing homes, etc., and identify the facilities, staff, and other resources that farmers would need to take advantage of these opportunities. SUNY New Paltz participated with several other SUNY campuses in a demonstration farm-to-college project beginning in 2013. An evaluation of the pilot project noted that the initiative “increased NY apple purchases by more than \$20,000 at just three campuses,” adding, parenthetically, “What if all NY colleges and universities only bought NY apples?”⁶
- Evaluate opportunities for selling agricultural products to local restaurants. Survey restaurant operators to determine whether and to what extent they purchase products from local farms, the products they would purchase if available, and any barriers to local purchasing.
- Expand local markets where farmers can sell directly to consumers. Consider holding farmers’ markets more frequently and/or in communities not currently served. Because farmers’ markets can accommodate only a limited number of vendors, however, other sales opportunities should be identified. A participant in one of the focus groups suggested allowing farms to establish pop-up markets and cafes along rail trails. Another possibility is to invite farmers to participate as vendors, for free, at fairs and festivals. These strategies not only increase the visibility of local farms; they also expand access to healthy food options.

⁶ Farm to Institution New York State, “Farm to SUNY Results,” January 19, 2016, available at https://finys.org/sites/default/files/2022-04/farm_to_suny_results.pdf.

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5. Explore the feasibility of developing a food hub, or elements of a food hub, to help smaller farms get their products into retail, wholesale, and institutional markets.



The U.S. Department of Agriculture defines a food hub as “a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products.”⁷ The term is used to describe an array of functions rather than a defined business structure; food hubs can be for-profit or non-profit entities or cooperatives. They also vary in the services they offer, their operational characteristics, their finances, and their mission.

A food hub in Ulster County would provide a convenient, centralized location where agricultural products from multiple farms could be aggregated, giving the many smaller farms in the area a chance to access more lucrative high-volume markets. Depending on its mission, the food hub could have a role in addressing food security and improving access to healthy food options by distributing fresh products to food pantries, free meal programs, senior centers, and community-based organizations. Restaurants represent another possible customer.

To determine whether a food hub in Ulster County would be successful, a feasibility study should be conducted. Through qualitative and quantitative research, it would fully assess the market for a food hub, identifying interested farmers and interested buyers. It would also determine the optimal business structure for a food hub, the services to be offered, the facilities and equipment required, and the risks involved. A financial analysis should be conducted. Lastly, the study would identify the steps to be taken to move forward.

Construction is nearly complete on GrowNYC’s **NYS Regional Food Hub** in the Bronx. The 60,000-square foot hub will facilitate the daily movement of thousands of pounds of produce grown by Northeast farmers. It is expected to support more than 120 mid-sized regional farmers, providing new business opportunities to producers scaling up to wholesale production. The food will then be directed to New York City institutions and organizations that serve low-income New Yorkers.

If a traditional food hub is not feasible, there may be elements of a food hub that are worth considering, such as a cold storage facility where farmers can rent space for their seasonal produce and meats, or a small-scale processing and co-packing facility where fresh-cut vegetables, baked goods, and other value-added products could be made.

⁷ U.S. Department of Agriculture, “Getting to Scale with Regional Food Hubs,” December 14, 2010, at <https://www.usda.gov/media/blog/2010/12/14/getting-scale-regional-food-hubs>.

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6. Work with a private business to expand an existing or establish a new USDA-certified meat processing facility.

To address a shortage of meat processing facilities in Ulster County, identify a private entity interested in expanding processing capacity to serve local farmers. Grants may be available from state and federal programs, including USDA Rural Development's Meat and Poultry Processing Expansion Program, which recently awarded more than \$83 million to independent processors in 15 states. Technical support and/or grant writing assistance may be needed.

In 2023, New York State created the Meat Processing Grant Expansion Program to address the demand for locally sourced meat, support livestock and poultry farms, and increase the capacity of processing facilities. Administered by HVADC, the state-funded program helps processors expand existing or new meat processing facilities. By the end of the year, HVADC had received 39 applications requesting more than \$7 million, and it subsequently awarded \$4.25 million in grants for 26 projects.

Ulster County could also facilitate the establishment of a processing facility by identifying a suitable and appropriate site with municipal water and moving it through the permitting and approval process to minimize development risks.

7. Advocate for the farm community and reduce the high cost of farming

The following strategies are recommended to advocate on behalf of the Ulster County farm community, address state and federal issues, and reduce operational costs:

- Expand Ulster County SWCD's agricultural equipment sharing program.
- Examine the feasibility of creating a new County property tax incentive for small farms and/or farms engaged in value-added production.
- Create an Agricultural Commodities Purchasing Program that would enable Ulster County to purchase commodities used on the farm (e.g., fertilizer, fuel) in large volume at a reduced cost. The commodities would then be sold to farmers, passing onto them the cost savings.
- Evaluate the economic impact of the apple industry on Ulster County. Use this information to recognize the importance of the industry and its heritage, and to advocate on behalf of apple growers to municipal and state leaders.
- Encourage New York State's I Love NY program to enhance its marketing of agriculture and agritourism activities.
- Advocate for changes to New York State's Farm-to-School program. Farmers in focus groups identified multiple barriers to participation in the program by farms and school districts, including too much paperwork, complex rules, the lack of flexibility, and other

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restrictions. As one farmer said: “It needs to be easier for schools to buy New York-grown products!”

- Advocate for increased benefits to farm owners under New York State’s Agricultural Assessment program.
- Advocate for federal immigration reform and simplifying the process of bringing temporary agricultural workers to the U.S. through the H2A program. Many farmers, especially tree fruit producers, report significant labor challenges; it is difficult to find people with specialized skills in pruning trees, picking fruit, and maintaining orchards. Agricultural employers often turn to the H-2A program, which requires an application to the U.S. Department of Labor. According to a 2021 report produced for GROW-NY, “hiring through the H-2A program in New York state has increased more than 80% since 2014. In 2020, NY farmers hired 8,482 workers through the H-2A program.”⁸



Photo by Uliana Ahashkova

⁸ Cornell University Center for Regional Economic Development Research, *A Call for Innovation: New York’s Agrifood System*, 2021, p. 24.

Chapter 6. Farmland Characteristics & Land Use Patterns

Background

Farmland and Farm Size Characteristics

According to the Census of Agriculture, the number of farms (486) in Ulster County largely remained unchanged on a net basis between 2012 and 2022 (the number decreased from 2012 to 2017, but rose again in 2022). However, there are 9% fewer farms in the County now than there were in 2002. Unfortunately, there has been a loss of about 12,000 cropland acres between 2002 and 2022 (a 30% decline).

See Appendix 5 for more details on farmland characteristics.

About 10% of the entire land base in Ulster County is farmed and this includes a mix of cropland, woodland, permanent pastureland, and farmsteads/buildings. Of the total farmland acreage in the County, 38% is cropland and 41% is woodland.

An important characteristic that offers insight into trends is the size of farms. The average size of farms, about 150 acres, has not substantially changed over the years. This is smaller than the average farm in New York State (212 acres). The largest number and share of farms in Ulster County (369, or 38%) are between 10 and 49 acres, most others are in the 50 to 179 acre range. Over the years, there has been a 51% decline in the number of very large farms greater than 500 acres, and a 42% decline in the number of farms with 180 to 249 acres. In fact, the only growth has been in the number of farms that are 10 to 49 acres. The trends show a loss of bigger farms and an increase in smaller farms. This is in part reflective of the loss of large dairy farms and the changed emphasis on crops grown.

Farmland Soils

The majority of the farming activities in the County take place in locations where soils are most conducive to agriculture. These areas are located along the Route 209 corridor and the Wallkill River valley (see Agricultural Soils Map in Appendix 1). Both prime farmland soils (including prime farmland if drained) and farmland of statewide importance can be found in the farming areas of the County but there are almost twice as many acres in farmland of statewide importance than prime farmland. Areas of prime farmland are found primarily along river valleys. According to our data on active farmland, and as shown below, 25% or less of the farmland soils are currently in production.

- 47,680 acres of prime farmland soils in the county, of which 12,006 acres are in production (25%).
- 93,123 acres of farmland soils of statewide importance, of which 13,968 acres are in production (15%).
- 25,870 acres of prime farmland soils if drained, of which 6,469 acres are in production (25%).

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Ulster County Agricultural & Farmland Protection Plan Update

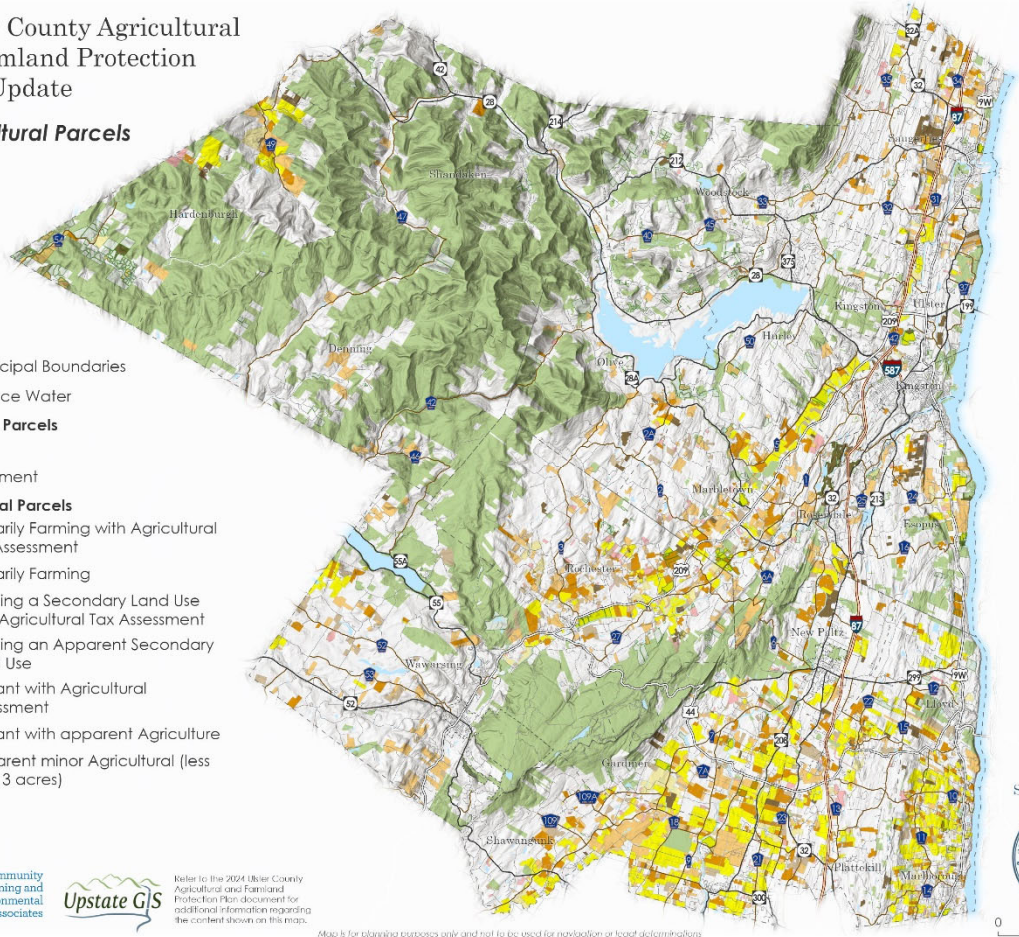
Agricultural Parcels

- Municipal Boundaries
- Surface Water
- Protected Parcels**
 - Fee
 - Easement
- Agricultural Parcels**
 - Primarily Farming with Agricultural Tax Assessment
 - Primarily Farming
 - Farming a Secondary Land Use with Agricultural Tax Assessment
 - Farming an Apparent Secondary Land Use
 - Vacant with Agricultural Assessment
 - Vacant with apparent Agriculture
 - Apparent minor Agricultural (less than 3 acres)



Refer to the 2024 Ulster County Agricultural and Farmland Protection Plan document for additional information regarding the content shown on this map.

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Agricultural Districts

New York State Agriculture and Markets Law 25-AA is a state law that establishes agricultural districts where farmers receive protection against local laws that unreasonably restrict farm operations. 25-AA also offers right-to-farm protection from private nuisance claims. New York State Agricultural Districts (Ag Districts) are designed to support a favorable operating environment for farms. This Audit was also conducted to identify consistency between local regulations and requirements imposed by NYS AML 25-AA.

The Agricultural Districts Map in Appendix 1 shows lands that are protected, and those lands included in the NYS Certified Agricultural District. Protected lands include those that are protected by both fee simple (owned by State, County, or Local Government, or a land trust) and those protected by an easement. There are 230,250 acres of fee simple land protected, and 16,212 acres having permanent conservation easements. There are 93 parcels with an agricultural use that have a conservation easement, totaling 5,345 acres, with 2,044 acres of active farmland. Easements are held by five known entities as summarized in Table 1 below.

Table 1. Agricultural Easement Holders			
	Farmland Acres	Parcel Acres	# of Parcels
Open Space Institute	406.5	1,317	24
Scenic Hudson Land Trust	537	1,040	23
Rondout-Esopus Land Conservancy	156.6	610	14
Wallkill Valley Land Trust	178.6	434	9
Mohonk Preserve	91.8	205	4
Unknown	674.3	1,739	19

The four Agricultural Districts, covering approximately 70,000 acres, show good but not full correlation to where farming is taking place. Eighty-four percent of the primary agricultural parcels and 41% of the secondary agricultural parcels are located within an agricultural district. There are 954 parcels, covering approximately 8,800 acres within an agricultural district that do not have an apparent agricultural use.

Rented Farmland

Based on an analysis of the ownership of the secondary and vacant agricultural parcels, 1,541 parcels (13,472 acres), or 48% of all agricultural parcels are estimated to be rented lands (33% of all farmland acres). Locations of these potential rented lands are shown on the Potential Rented Land map. Land rented from non-farm owners is an important resource supporting farms in Ulster County. Evaluation of the changes in the ownership of agricultural lands can help identify if there have been significant changes taking place. About 26% (716) of all parcels identified as having a primary or secondary agricultural use have non-local owners (i.e., landowners without an Ulster County address). Non-local owners own 8,066 acres of farmland, or 20% of all active agricultural acres in the County. Within Ulster County

See Potential Rented Land Map in Appendix 1.

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Agricultural Districts, there are 433 parcels with non-local landowners, 292 of which have an agricultural use, with a total of 5,573 acres of active farmland. This indicates that rented land has substantial importance to agriculture in the County.

Farmland Conversion Pressure

Significant development pressure exists in Ulster County. An analysis of parcel and assessment data shows that between 2014 and 2023:

Data tables for this section can be found in Appendix 3. See also the Change 2014-2023 Map and Recent Development Map in Appendix 1.

- 2,083 new homes were built in Ulster County on 13,577 acres (based on year-built data within the tax parcel database).
- The number of parcels now identified in tax parcel data from local assessors as having a residential use increased in that time frame from 59,840 to 61,416 (222,087 acres and 227,2936 acres, respectively).
- The number of parcels assessed or “site used” for agriculture rose from 814 parcels to 839 parcels (37,744 acres and 38,456 acres, respectively).
- Between 2014 and 2023, there were 111 agricultural parcels (2,422 acres) converted to other uses, including residential and vacant land. At the same time, there were 67 parcels (2,990 acres) that were converted to agriculture or identified by the local assessors as being in agriculture use in 2023. The number of parcels primarily used for agriculture that converted to residential use (1,818 or 12, 694 acres) was much higher.

Another way to look at changes taking place in the County is by comparing land classification data from different years. By comparing 2016 to 2021 land cover data, we see a decrease in agricultural land area and an increase in residential land area (see Table A3-2 in Appendix 3).

Specifically, there have been:

- A loss of herbaceous land cover (33%)
- A small decrease in agricultural land cover types (-2.5%)
- A slight increase in developed land acreage (+0.3%)
- Little change in forested, or wetland acreage
- A more significant change in barren land (23%) and shrub/scrub lands (12%)

The County has experienced changes in land ownership patterns. Between 2014 and 2023, there was a 1% increase in the total number of parcels with owners outside Ulster County. Among parcels coded as agricultural, non-local ownership decreased; it also decreased among vacant parcels, many of which are likely now coded as residential. Residential parcels, on the other hand, experienced an increase in non-local ownership. Although the County has seen an increase in non-local land ownership overall, it appears that growth has occurred largely on residential parcels rather than on farmland.

Critical Farmlands in Ulster County

To identify important farmlands, Ulster County undertook an analysis to define and map priority farmlands. The analysis considered a variety of important agricultural factors such as farm size, soils, location and development pressure. A more detailed description of the analysis that was used to develop this map can be found in Appendix 6 and a summary of the scoring is present in Table 2 below. The Farmland Protection Priority Areas and Parcels map shows the results of this analysis.

See Farmland Priority Areas and Parcels Map in Appendix 1.

Criteria	Scoring Criteria		
	<50 acres	50-100 acres	>100 acres
Parcel(s) with agriculture as primary use	1 Point	3 Points	5 Points
Parcel(s) with agriculture as secondary use	1 Point	2 Points	3 Points
Percent of farm in active farming*	25-<50%	50-80%	>80%
	1 Point	3 Points	5 Points
Percentage of high-quality soils (Prime or State Importance)	25-<50%	50-80%	>80%
	1 Point	3 Points	5 Points
Farms within 100' of a water resource (stream, lake or wetland)	>10 acres water source buffer = 3 Points		
	1-10 acres = 1 Point		
Proximity to conserved land	Adjacent Farmland	Adjacent Non Farmland	Within ¼ mile
	5 points	3 points	1 Point
Frontage along U.S., State or County Road	500-<1,000 ft	1,000-<2,000 ft	≥2,000 ft
	1 Point	3 Points	5 Points
Proximity to active farmland	Adjacent	Within ¼ mile	
	2 Points	1 Point	
Proximity to water and sewer	500'	¼-mile	½-mile
	3 Points	2 Points	1 Point
Within an area of increased development or Proximity to Village or CDP (0.5 miles)	3 Points		
Farms that receive an agricultural or forestry value assessment	1 Point		
Proximity to 3-Phase Power	≤ 500'	> 500' and ≤ ¼-mile	
	2 Points	1 Point	

* and/or containing deciduous trees for parcels with a forestry exemption

Scoring is by “farm” – parcels with agricultural uses merged by common ownership that are contiguous with one another (including if only separated by road or utility right-of-way). In addition to parcels with agricultural uses, land coded as Vacant Rural (320), Abandoned agricultural land (321), Residential vacant land over 10 acres (322), and Rural residence with acreage (240) were also included in the analysis as these parcels could have agricultural uses in the future.

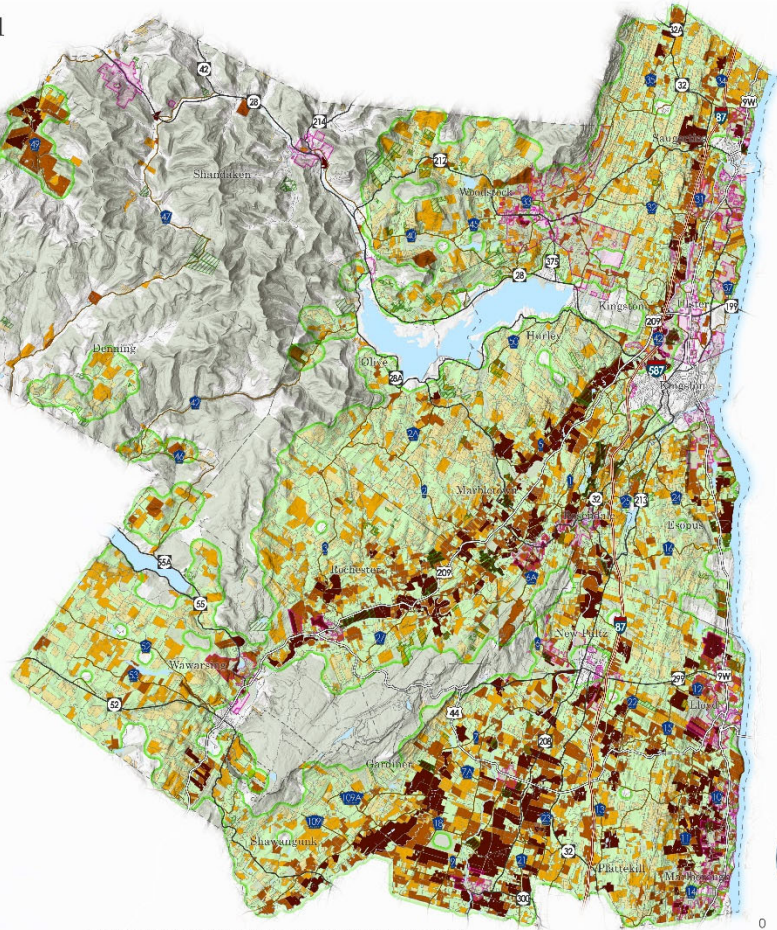
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DRAFT
6/10/2024

Ulster County Agricultural & Farmland Protection Plan Update

Farmland Protection Priority Areas and Parcels

- Priority Areas for Farmland Protection
- ▭ Municipal Boundaries
- ☪ Surface Water
- ☒ Water and/or Sewer Districts
- Protected Parcels**
 - ▭ Fee
 - ▭ Easement
- Farm Priority Score**
 - Far Above Average
 - Above Average
 - Average
 - Below Average



Map is for planning purposes only and not to be used for navigation or legal determinations



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Regulatory Barriers to Farming

An audit of the comprehensive plans and zoning laws in the Towns of Gardner, Marbletown, Ulster, and Marlborough in Ulster County was completed as part of development of this Plan. The audit was designed to help gauge the ‘farm-friendliness’ of representative local plans and land use laws to help identify areas that could be improved in the future. Specifically, this Audit reviewed the farm-friendliness of local plans and regulations to identify elements that are both working to support agriculture and where improvements could be made to enhance agriculture in the County.

What is Reviewed in the Audit?

A comprehensive plan is an important community document because it is the foundation for local land use regulations. Land use regulations need to be consistent with a community's plan because regulations should be designed to meet community needs and objectives – which are usually outlined in a comprehensive plan. The plan establishes the vision a community has for itself, which is then translated into land use regulations, such as zoning and subdivision. Farm-friendly communities have comprehensive plans that map, set goals for, and discuss the role of agriculture in their community and establishes policies to promote agriculture.

Zoning can create opportunities for agriculture but also can place barriers to farming or certain farming practices. Zoning identifies whether a farm use is permitted, whether a municipal review process such as a site plan or special use permit approval is required, or whether setbacks, height, or acreage requirements are needed. When these regulations exist, they are potential barriers or challenges to agriculture.

Zoning laws sometimes regulate where and how farms can operate, and what review processes a farmer may be required to undertake. Land use regulations can define and allow certain farm activities or can explicitly prohibit others. Sometimes land use regulations introduce confusion when certain uses are not adequately defined. Vague zoning introduces uncertainty for farmers, which can also lead to unnecessary or lengthy permit reviews. These issues are especially poignant given trends for farm diversification, addition of value-added processing or activities on the farm, and modern farming techniques.

Subdivision laws regulate how land is divided. Although subdivision laws do not regulate land use like a zoning law does, they have a great deal of influence on how non-farm development gets done and whether it is done in a manner compatible with farm neighbors.

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Consequences of Local Plans and Laws that are Not Farm-Friendly

Choices made by local communities in their local land use regulations can have many consequences including affecting land values; making farm expansion or start-ups difficult; contributing to land use conflicts; and even hastening conversion of farmland to other uses. When local laws restrict agricultural uses, a sense of impermanence for farming can develop as farmers begin to feel that non-farm uses will ultimately take over in the area.

That feeling of impermanence can in turn foster disinvestment in farm operations and ultimately lead to furthering the sale of land for non-farm development. With low profitability, selling land for non-farm development may be a necessity or at least very appealing to some farms or farmland owners. Understanding the local regulatory climate is the first step towards improving an area's farm-friendliness.

Farm-Friendly Audit Conclusions for Gardner, Marbletown, Ulster, and Marlborough

These four towns exhibit a variety of farm-friendliness components. Although three of the four towns have older comprehensive plans, they are all very supportive of agriculture and express a desire for the long-term continuation of farming in the community.

See Appendix 7 for the full Audit and its results

While they are all farm-friendly, even the most recent one (adopted in 2017) is quite old and probably no longer reflects current conditions in the town for all land uses, including agriculture. The local agricultural and farmland protection plan in Marbletown is comprehensive and could be easily updated. Other towns should take advantage of doing their own local-level plan to gain data and specifics to plan for agriculture long-term.

The subdivision laws in each of the four towns are also out of date, and do not adequately address agriculture in any significant way as a resource of importance to be considered during subdivision review. Newer subdivision regulations recognize protection of farming and farmland use tools such as designation of building envelopes in suitable locations, identification of prime soils and soils of statewide importance to be evaluated during subdivision, rural siting/design standards to ensure that new development limits farm fragmentation and maintains farm field access, and use of conservation subdivision designs that can protect important farmlands when development takes place are all elements that could be included to make these subdivision laws more farm friendly.

While each town has some component of their zoning that is farm friendly, overall, definitions are poor and often have conflicting language. Definitions in zoning are vital to avoid confusion. None of the reviewed zoning laws addressed the many farm uses we see today in the County (e.g., direct sales, CSAs, agritourism, value-added activities). In order to survive, farms need to diversify, and many have multiple types of businesses on their farm premises. When zoning doesn't address these, it introduces uncertainty as to whether the use is allowed, whether it needs some sort of planning board review, or what requirements must be met. Farm-friendly zoning on farm operations that meets the state and local definitions would define and allow a variety of farm operations and related businesses that take place and allow for them. Zoning should also be specific and clear about farm-related activities so that farmers are not required to guess or go to the ZBA for interpretations of vague language.

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Finally, it is especially important to ensure that land use regulations are consistent with requirements from NYS AML 25-AA (the NYS Agricultural Districts law). Requiring site plans or special use permits, setbacks, fencing, meeting certain size limitations, or limiting the number of types of animals on farms in a NYS Agricultural District is not consistent with New York State law, is not considered farm-friendly and should be avoided. There are opportunities for the County to assist local governments and planning boards by providing training on farm-friendly planning and regulatory options to enhance the farm-friendliness of local land use laws.

Trends and Issues

Positive Trends

- Most farms in Ulster County are within the NYS Certified Agricultural districts, and farmers see that as an advantage. (See Agricultural Districts Map in Appendix 1.)
- The County offers clean air, clean and abundant water resources, and quality soils that provide excellent growing conditions.
- Climate conditions are still good for growing a diversity of crops and commodities, including apples.
- Farms remain significant land uses that contribute to both community character and the overall economy in the County.
- The Ulster County community has a great appreciation of the beautiful landscape in the County.
- Farms in the County have close proximity to markets, including NYC.
- Local towns have recognized the role that agriculture plays in their communities in their comprehensive plans.
- Growth in the number of small farms.
- Agricultural value assessments.

Issues and Challenges

- There has been a loss of acreage devoted to farmland.
- Development pressure and conversion of farmland to non-farm purposes:
 - Fragments farmland, promotes sprawl and low-density residential development, increases adverse interactions with non-farm landowners; and
 - Housing encroachment and impact on groundwater supplies (especially critical for apple growers, who rely on irrigation).
- There has been a decline in large acreage farms.
- Changing climate and weather patterns, and weather extremes are a challenge for producers. In addition to affecting the viability of crops, they have increased pests, invasive species, and disease pressure.
- A lack of secure, affordable land leases with non-farm property owners makes it difficult for farmland renters and adds uncertainty that can prevent investment in needed farm infrastructure.

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- Lack of understanding among non-farmer property owners about farming practices and needs increases uncertainty for farmland renters and can adversely affect the agricultural operations and practices needed to be profitable.
- Lack of understanding by elected and appointed officials about agricultural practices can result in farm-unfriendly land use policy development at the town level.
- Farmers have difficulty providing quality and affordable farmworker housing – not just for seasonal workers, but for also year-round workers. This is especially difficult for farmers who lease farmland.
- There is a lack of farmland protection programs:
 - A majority of the lands protected by easements are designed to protect open space, not farmland;
 - Few farmers in the County are taking advantage of NYSDAM Farmland Protection Implementation Grant Programs.
 - There is a lack of funding for farmland protection which needs to include upfront costs and stewardship fees related to easement programs. Lack of methods such as bridge loans or matching funds adds to the difficulty in land protection programs.
 - Area land trusts lack the capacity to expand their programs to concentrate on farmland protection often due to lack of staff and lack of funding. There are too few land trusts engaged in farmland protection (versus open space protection).
 - Management of some conservation easements has made it difficult to continue needed agricultural practices and operations.
 - The time it takes for farmers to obtain easements is very long and this causes difficulties for farmers who need the funding sooner rather than later. Long time periods also pose difficulties as land prices are rising quickly and easement applications do not always reflect updated property values.
- There is a need for farm transition and succession planning. As farmers age, there are few new farmers to take over. Without a new generation of farmers, selling land for non-agricultural uses becomes more likely when farmers retire.
- Ulster County has experienced a dramatic increase in land and housing prices which makes it even harder for farmers to access land to rent or to buy, or to provide housing for farmworkers.
- There is a lack of full understanding of the New York Agricultural Districts program and agricultural value assessments.



Photo by Uliana Ahashkova

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- A lack of processing facilities (e.g., slaughterhouses, meat processing, hide tanning, hemp processing) makes it more costly and difficult for farmers to sell, market, or develop value-added products.
- Lack of infrastructure such as hotels, restaurants, and transportation options limits farmers' ability to diversify into agritourism and direct sales.
- Beginning and new farmers have challenges accessing land that is affordable and available. High land prices make it very difficult to buy land outright.
- Large-scale solar farms use up farmland and prime farmland soils.
- Legislative changes such as NYS overtime rules for farmworkers impact agriculture negatively and add a cost burden that is not economically sustainable.
- Local issues related to land use conflicts, traffic at agritourism events, use of farmstays, and lack of definition of agritourism and other farm-related uses can cause conflict, lead to lack of support for agricultural activities, and farm-unfriendly regulations.
- There has been a loss of orchards as the next generation moves out of agriculture entirely, or into other farm types.
- NIMBYism and racism among residents have been identified as a significant obstacle for BIPOC farmers.
- Some agricultural lands in the County overlap with NYC Watershed, which imposes other rules that farmers must follow.
- There is a lack of a public effort in Ulster County to protect farmland.
- Farm buildings used for processing and tastings are assessed and taxed as manufacturing facilities instead of recognized as part of a farm operation, leading to higher taxes and costs that may not be affordable.
- Some communities in Ulster County have out-of-date comprehensive plans that do not adequately evaluate or address farming in their community.
- Regulations at the local, state and federal levels can adversely impact farm profitability. Local subdivision regulations may be out of date and do not include new methods that include the use of tools such as building envelopes, identification of prime soils and soils of statewide importance that should be evaluated during subdivision, or rural siting/design standards. Zoning definitions do not reflect the wide diversity of agriculture-related businesses that are taking place. Local land use regulations can be improved to be consistent with requirements from NYS AML 25-AA (NYS Ag Districts).
- Farmers have a sense of feeling abandoned by government representatives at all levels.
- Some aspects of local zoning may not be farm-friendly due to over-regulation, lack of definition, and lack of addressing new types of farm operations.

Farmland Characteristics and Land Use Patterns Goals

The following foundational goals are established related to farmland and future land use.

- Identify and protect critical productive farmland areas.
- Reduce adverse farm/non-farm interactions.
- Enhance outreach to decision-makers to promote understanding of the role and needs of

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agriculture and local farm-friendly regulations.

Farmland Characteristics and Land Use Patterns Recommendations

The following recommendations are designed to address both challenges and opportunities related to farmland protection and land use planning for farms in Ulster County. These are derived from public input, the Advisory Committee, and team consultants.

Those items identified as a priority strategy or action are identified with this icon and are further detailed in Chapter 9.



1. Create a county-level “**Farm Friendly Ulster**” initiative similar to that of the County’s Housing Smart Community Initiative to promote farmland protection and local farm-friendly planning and land use programs. Recommended components of this initiative include:

A. Farmland Preservation Actions

1. Establish an agricultural land conservancy or work with one or more existing land trusts in the area dedicated to protecting farmland from encroachment, modeled after the non-profit Agricultural Stewardship Association in Washington County. In addition to its primary role of holding land conservation/conservation easements to protect farmland, additional roles for the proposed land conservancy (or enhanced capacity of an existing land trust) could include:
 - Facilitate access to affordable farmland.
 - Evaluate creative models for land access, such as lease-to-own, farm incubators, cooperative farming, etc., recognizing that one size does not fit all.
 - Develop model lease agreements for farmers and property owners to use that define roles, responsibilities, and rates
 - The land trust could acquire land that could be divided into farm plots and leased to new/young/beginning farmers. Example: Land Lease Program operated by the Chester Agricultural Center in Orange County. The organization owns 270 acres and makes land available through long-term affordable leases. Lease fees include access to land, farm infrastructure (greenhouse space, cold + tool/equipment storage, wash pack space), and shared utilities. The farm operations on the site lease between 3 and 60 acres.
 - Promote use of Option to Purchase at Agricultural Values. OPAV is a legal tool used to keep land affordable to farmers with commercial agricultural operations, and to discourage conversion of good farmland to large residential properties. OPAVs restrict sale of land to qualified farmers or family members and restrict sale price related to agricultural values.
 - Develop a land access program for small, new and young farmers to get a start in agriculture in a manner that is affordable.
 - Work with farmland owners to develop NYS Farmland Implementation Grant applications to protect critical farmlands in the County.

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- Work with other area land trusts to gain additional NYS funding for land trust work including programs to prepare farmland assessments as the foundational step towards valuing farmland in the County.
- Develop new tax incentives to lease land for new farmers and for those who agree to have agricultural/conservation easements.
- Support this land trust or other land trusts gain additional NYS Department of Agriculture and Markets funding for farmland protection.




Photo by Uliana Ahashkova

B. Farm-Friendly Planning and Regulatory Actions

1. Promote updated town comprehensive planning. Assist local municipalities in development of updated comprehensive plans that include maps, data, and current conditions from this County plan to aid them in local agricultural land use planning.
 - Develop outreach specifically to enhance local elected and appointed officials' knowledge about agriculture in the County and their town, the role agriculture plays in their community, and the needs of agriculture.
 - Provide town-level data on agricultural resources and land uses to each Town so that they can have maps, information and GIS data that can be used for town-level planning. Provide a town-level profile for each town to enhance local planning for agriculture and farmland.
2. Provide model subdivision and zoning language. To promote consistency and to advance farm-friendly local regulations, the County could develop and provide model subdivision and zoning language that Towns can use to advance their own local farm-

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friendly land use regulations. By providing model definitions, list of ag-related businesses that could be included in a zoning use table, farm-friendly tools such as conservation subdivision, use of farm buffers, etc., the County can help local governments understand and rectify regulatory roadblocks to farming. Model language that is recommended to be developed and implemented across Ulster County includes:

- Conservation Subdivision where 50% of a lot is preserved for agriculture at the same time that the base density of housing is allowed.
 - Agricultural Overlay Districts
 - Farm Buffers
 - Density Bonuses in exchange for permanent protection of agricultural lands
 - Use of average lot size for minor subdivisions to enhance flexibility and allowance of mix of lot sizes – including those able to be used for agriculture.
 - Definitions to support agriculture and agritourism, direct sales, processing, etc. including those that assist local municipalities in development of definitions that are consistent with AML 25-AA.
 - Right-to-Farm provisions
 - Rural siting standards for non-farm development
3. Provide materials, training, and model language related to NYS Agriculture and Markets guidance and rules on allowance for farmworker housing in zoning.
 4. Use the Farm-friendly Audit criteria in this Plan to identify other model language and methods the County can develop to aid local towns in updating their land use regulations.
 5. Work with NYS Department of Agriculture and Markets to review model language for subdivision, zoning, and other local land use laws to ensure consistency between local laws and State regulations.
2. Increase funding, incentives, and financial planning assistance to farmers. Additional support is needed to help farmers access, stay on and invest in their land. Several recommendations made in Chapter 5 (Agricultural Economic Viability) also address this need. In addition to those other economic viability funding recommendations, other recommended actions and strategies related to promoting farming and maintaining farmlands are:
 - A. Consider developing new funding mechanisms at the County level specifically to finance the acquisition and management of farmland and the purchase of development rights. 
 1. Create a county-level grant/matching program (like Orange or Dutchess County) to support farmers and local municipalities seeking to preserve active farmland through the Purchase of Development Rights that places permanent conservation easements on active farmland. (Readers Aid Box). Such a grant/match program will assist those who wish to protect their lands through programs that require matching funding. Having a County grant/match program

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will help organize and facilitate applications to NYS or Federal farmland protection programs and will make it easier and more attractive for farmers to participate in these programs.

2. Promote use of a Real Estate Transfer Tax to fund farmland protection. Ulster County has the benefit of being covered by the Hudson Valley Community Preservation Act (CPA), which authorizes municipalities to create a Community Preservation Fund with a Real Estate Transfer Tax (RETT) of up to 2% of the portion of real estate sales above the county median housing price. To date, New Paltz, Gardner and Marbletown have approved local plans, passed a ballot referendum establishing this mechanism, and are poised to protect active farmland.



Photo by Uliana Ahashkova

3. Create and fund a County supported PDR program to promote farmland purchases for land or agricultural easements. Funding could come from fees, RETT, general fund, or other sources such as use of a density bonus program (see box using Ballston as an example).

The County could use PDR and other funds to develop a land access program. This program can provide funding to enable farmers to affordably access land to initiate or expand farm operations. It can also support purchase of a parcel of farmland that could serve as an incubator. Plots of land could be offered at low or no rent to help enhance land access for new, young, veteran and other starting farmers.

- B. Work with the Ulster County IDA and other economic development agencies to reduce the use of PILOTs (Payments in Lieu of Taxes) for development projects that may adversely impact farm operations or diminish important farmlands.
- C. Provide incentives and financial support for attracting and retaining new, young, veteran, and BIPOC farmers.

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- D. Work with local Town assessors and officials to enforce NYS AML 25-AA fines to be imposed when farmland which has benefited from receiving an agricultural assessment is converted to non-farm uses. The fines, which are often ignored at the local level, are levied to be a disincentive to converting farmlands. Funds from those fines can be used locally for other farmland protection planning or protection programs.
 - E. Enable land to continue agricultural production while producing renewable energy and providing revenue for the farmer. Support advocacy, technical assistance, and funding opportunities for “Farmer First Solar” facilities. Establish policies for renewable energy facilities to be designed to maintain prime and critical farmlands in agricultural production. See also Chapter 8 (Supportive Infrastructure).
3. Training, technical support, advocacy, and other programs to advance protection of farmland. In addition to specific farmland protection programs and funding programs recommended above, the following initiatives are also recommended to provide Ulster County with an in-depth farmland protection program.
- A. Develop model lease agreements to enhance formal agreements that farmers can use to obtain longer-term, stable leases with non-farm owners so that they can grow their farm businesses. These model leases should also include information on farmland rental rates, outline expectations, discuss the type of farm operation and land use expectations, and details related to agricultural assessments.
 - B. Use the priority farmland map included in this Plan to guide acquisition of critical farmlands with the long-term aim of keeping farmland as a connected or nearby block of land to the maximum amount to keep farmland from further fragmentation.
 - C. Work with CCE, SWCD, farm organizations in the County, and farmers to develop a program and technical expertise to help farmers develop farm transition and succession plans.
 - D. Improve or develop farm link programs that link farmers with farmland owners and support these efforts.
 - E. Pass an updated Right-to-Farm Law in Ulster County and assist Towns to adopt or strengthen existing right-to-farm laws in local municipalities. Ensure that agritourism is specifically covered as a farm activity in the Right-to-Farm law(s).
 - F. Provide detailed input and advocacy to New York State as they update the State Open Space Plan to ensure that agricultural lands are raised in importance in that plan as important open spaces in the State.
 - G. Promote the Farming for a New Generation program: [Farmland for a New Generation New York: Bringing a New Generation of Farmers to the Land \(nyfarmlandfinder.org\)](https://www.nyfarmlandfinder.org)
This is a robust, multi-faceted state-wide program coordinated by American Farmland

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Trust – in partnership with the State of New York, agricultural organizations, land trusts, and others – that helps farmers seeking land and landowners who want to keep their land in farming.

- H. Support grant applications and other efforts to promote town-level agricultural and farmland protection plans.



Chapter 7. Resiliency and Sustainability

Background

Climate change refers to significant and lasting changes in the average weather patterns that have come to define Earth's local, regional, and global climates. It involves alterations in temperature, precipitation, and other climate variables over long periods, typically decades or longer. The primary driver of climate change is the increase in greenhouse gases, such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) in the atmosphere due to a variety of human activities such as burning fossil fuels, deforestation, and industrial processes. These gases trap heat in the atmosphere, leading to the greenhouse effect, which raises global temperatures and causes a myriad of other climate-related impacts.

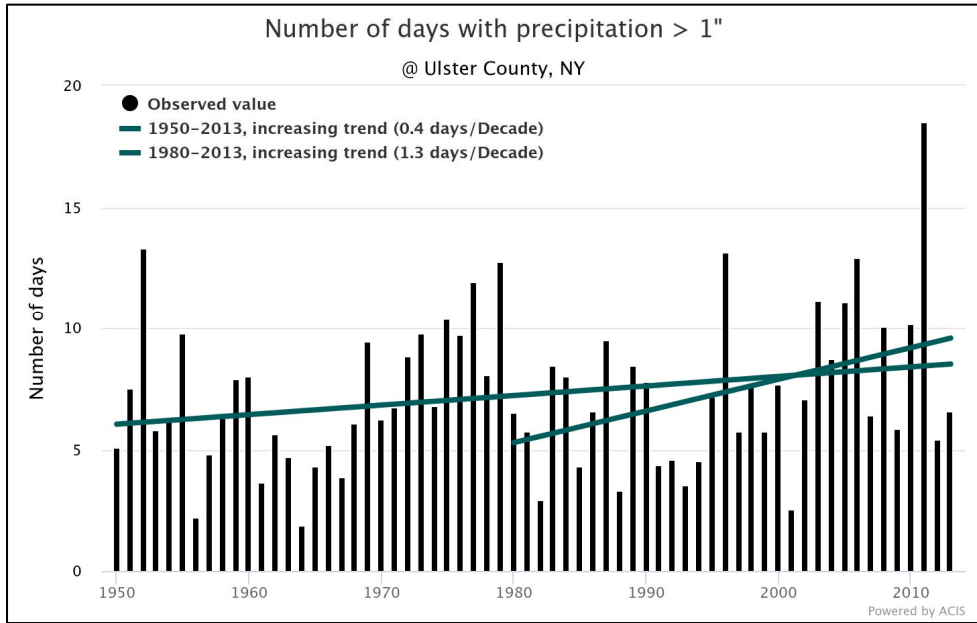
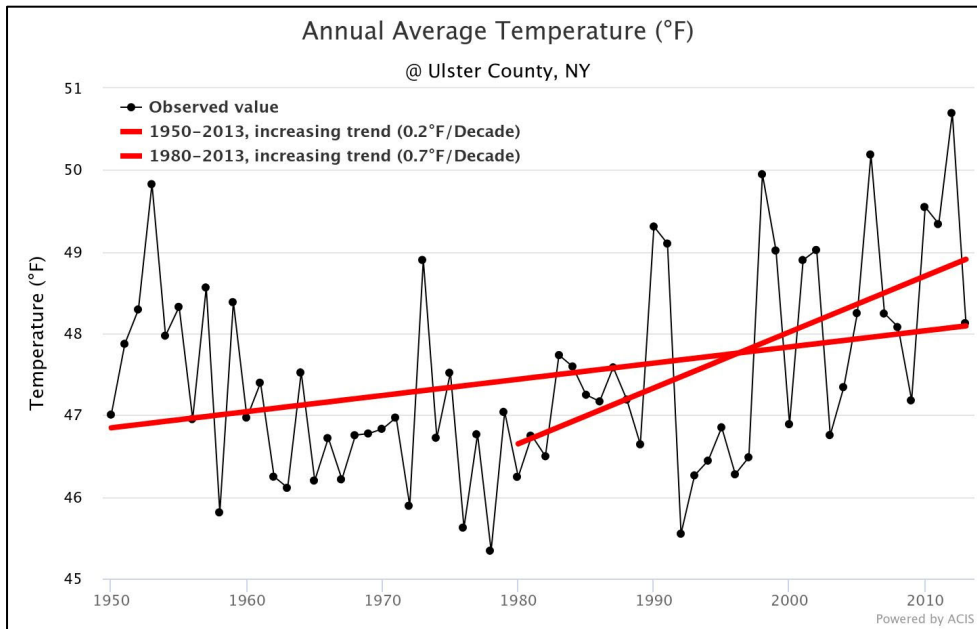
The consequences of climate change are felt to be diverse and far-reaching. Many of these are already being experienced in Ulster County. They include more frequent and severe weather events such as hurricanes, heat waves, droughts, and heavy rainfall, which can lead to flooding. Additionally, climate change affects biodiversity, leading to shifts in species distributions and the timing of biological events, which can disrupt ecosystems and growing seasons.

Beyond environmental impacts, climate change also poses significant risks to agriculture. This section of the Plan discusses the changing weather patterns Ulster County is already experiencing and discusses potential adverse impacts that may occur over time. It also presents goals and a series of actions that the County and its agriculturally-related partners and the farm community can take to help promote resilient and sustainable agriculture.



Trends

The following data and charts summarize Ulster County climate trends from 1980 to 2013.⁹



⁹ From the Cornell Climate Smart Farming website: <http://climatesmartfarming.org/tools/csf-county-climate-change/>

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Other climate change trends include:

- Annual Average Temperature: +0.7 degrees Fahrenheit per decade
- Annual Average High Temperature: +0.7 degrees Fahrenheit per decade
- Annual Average Low Temperature: +0.6 degrees Fahrenheit per decade
- Number of Days with High Temperature >90 degrees: +1.6 days per decade
- Growing Season Length (Consecutive Days > 32 degrees Fahrenheit): +2.36 days per decade
- Annual Growing Degree Days (50 Degrees Fahrenheit Base): +114.7 GDD per decade
- Total Annual Precipitation: +4.1 inches per decade
- Annual Number of Days with Heavy Precipitation (> 1 inch): + 1.3 days per decade

The 2024 New York State Climate Impacts Assessment projects temperatures across NYS to increase from 2.5 to 4.4 degrees Fahrenheit more by the 2030s.

Potential Impacts on Agriculture¹⁰:

The New York State Climate Impacts Assessment on Agriculture¹¹ has summarized key findings related to climate change in New York State:

“Key Finding 1: The most severe impacts of climate change to the agriculture sector are associated with extreme precipitation, short-term drought, heat stress, warmer winters, late spring freezes, increased pest pressures, and increased production costs. Extreme precipitation damages crops, fields, and farm infrastructure; short-term drought reduces crop yields and causes water shortages; heat stress affects livestock, crops, farmers, and farmworkers; late spring freezes after bloom cause losses in perennial fruit crops; and increased weed, disease, and insect pressures cause crop damage. Projected increases in temperature and precipitation extremes will cause these impacts to become more severe over time.

For more in-depth discussion and analysis about climate change impacts on agriculture, see the New York State Climate Impacts Assessment, Chapter 3 at <https://nysclimateimpacts.org>

Key Finding 2: Climate change is a threat multiplier for agriculture in New York State. Farmers already face many stressors such as tight profit margins and labor shortages. Climate change exacerbates these stressors by producing more weather extremes, causing damage that requires unanticipated expenditures, and shortening operational windows. These stressors are further compounded in economically stressed, often rural

communities and among historically underserved and vulnerable populations. Opportunities exist to address the negative effects, by both adapting to the direct climate impacts and managing the existing non-climate stressors.

¹⁰ From USDA Climate Hubs:

https://www.climatehubs.usda.gov/sites/default/files/adaptation_resources_workbook_ne_mw.pdf

¹¹ nysclimateimpacts.org/wp-content/uploads/2024/02/Assessment-ch3-agriculture-01-31-24.pdf

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Key Finding 3: Farmers and other agricultural stakeholders show awareness and acknowledgment of climate change impacts on agriculture. Farmers and other agricultural stakeholders (e.g., extension agents, technical service providers, consultants) in New York are reporting increases in extreme weather events, variability, and uncertainty, which have disrupted common operations. Providing more information on anticipated changes, impacts, and solutions will help farmers plan, adapt, and remain profitable.



Photo by Uliana Ahashkova

Key Finding 4: Farmers are implementing and investing in practices that make their farm businesses more resilient to climate extremes. Adaptation strategies depend on farm location and size, observed climate impacts, commodities produced, and costs. Many of these strategies, such as improving soil health, are beneficial for farms to adopt regardless of climate change and can also provide the co-benefits of reducing greenhouse gas emissions. While these adaptations are unlikely to fully alleviate the future climate impacts projected for New York, they are key to making the state’s farms more resilient.

Key Finding 5: Enhanced technical support, financial assistance, and research are crucial to increasing the adaptive capacity of farms across New York State. Farms will face greater risk of physical, social, and economic losses due to climate change without more support to implement adaptation measures. Active engagement between policymakers, farmers, and other agriculture stakeholders can help shape climate and agricultural policies and programs that are realistic for farm businesses.”

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In Ulster County, farmers will be facing:

- Extreme temperatures. Annual average and seasonal air temperatures are increasing which means:
 - Number of hot days and hot nights is increasing
 - Warmer winters
 - More late spring freezes/ earlier budbreak
 - Warmer temperatures increase potential for soil moisture stress and drought
 - Greater heat stress to crops and livestock
 - Higher concentrations of atmospheric carbon dioxide may disproportionately benefit corn but not other plant species. However, hotter temperatures may reduce yields of corn. Climate change has significant impacts on maple production due to its vulnerability to temperature, and wheat can be adversely affected as well. There are a host of other plants that can be impacted as well including soybeans, tart cherries, and blueberries.
- Seasons are shifting (the length of the frost-free season has increased by 10 days in the Northeast US) and include earlier spring thaws and later first frosts.
- Precipitation patterns are changing which will lead to more short-term droughts/ flooding and increase of flood damage (see next section).
- Soil depletion.

As per the USDA AgRisk Viewer¹², climate-related causes of crop losses were due to heat, drought, freezing, cold/wet, hail, and rain. All these weather-related issues are anticipated to increase as climate change continues.

Most losses were in the apple industry and corn. Between 1989 and 2022, most monthly losses occurred in April, May and June. Starting in 2019, payment for loss by acreage significantly increased: in 2019 there were 558 acres that got payment losses and in 2022, there were 319,310 acres.

Climate Change Induced Flood Risk - An Analysis

Because increased flooding is a significant risk that can impact Ulster County farms from climate change, a basic agricultural flood risk assessment was completed. This classifies the risk of each individual farm field on a five-tier scale from High to Minimal Flood risk. See Table 3 and the Agricultural Flood Risk Map, below.

The flood risk analysis shows that 575 fields or about 8,000 acres of current farm fields have a moderate to high flood risk. These areas are concentrated along Route 209 in the Town of Rochester, along Route 209 in the Towns of Marletown and Hurley, and along the Wallkill River from just north of New Paltz south to the Town of Gardiner. The southeastern agricultural areas

¹²<https://swclimatehub.info/rma/rma-data-viewer.html>

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where many farms in the County are located have less risk for flooding as shown on the map below.

	Fields	Acres
High Flood Risk	444	6,572
Moderate Flood Risk	131	1,436
Elevated Flood Risk	955	11,551
Slight Flood Risk	1,446	13,991
Minimal Flood Risk	1,183	7,538
<i>Points: High 8-11 points, Moderate 5-7 points, Elevated 2-4 points, Slight 1 point, Minimal 0 points</i>		

Methodology of Flood Risk Analysis

To assess the flood risk, points were assigned to each field using the formula “Points = Flood Risk (FR) 3 / 10 + FR2 / 20 + FR1 / 30 + Risk area.” In this formula:

- FR3 = percent of field within 1% annual flood risk and flood zones,
- FR2 = percent of field within 0.2% annual floor risk,
- FR1 = percent of field within areas outside FEMA flood zone, which are a riparian buffer area and/or soils that have poor or very poor drainage during wettest conditions and/or frequent ponding, and
- Risk area = 1 point if field center within 1/2-square mile hexagon that is < 50% wooded and > 5% impervious.

We also assigned points based on the following:

- Parcels with FR3 of any amount minimum of 2 points,
- Parcels with FR2 of any amount minimum of 1 point,
- Parcels with FR1 of 10 percent or more minimum of 1 point.

The final flood risk score would be the maximum of the two methods.

The “Risk area” was created using a 1/2-square mile hex grid and then calculated the percentage of trees and impervious cover using NOAA's newly released (2021 data) 1-meter data. The rationale is that less trees and more impervious area would lead to higher instances of run-off during storm events. Also, during the summer these areas would likely have hotter conditions, which while not directly flood related, could impact crops and also could dry out the soil more between rain events making them more susceptible to loss during storms.

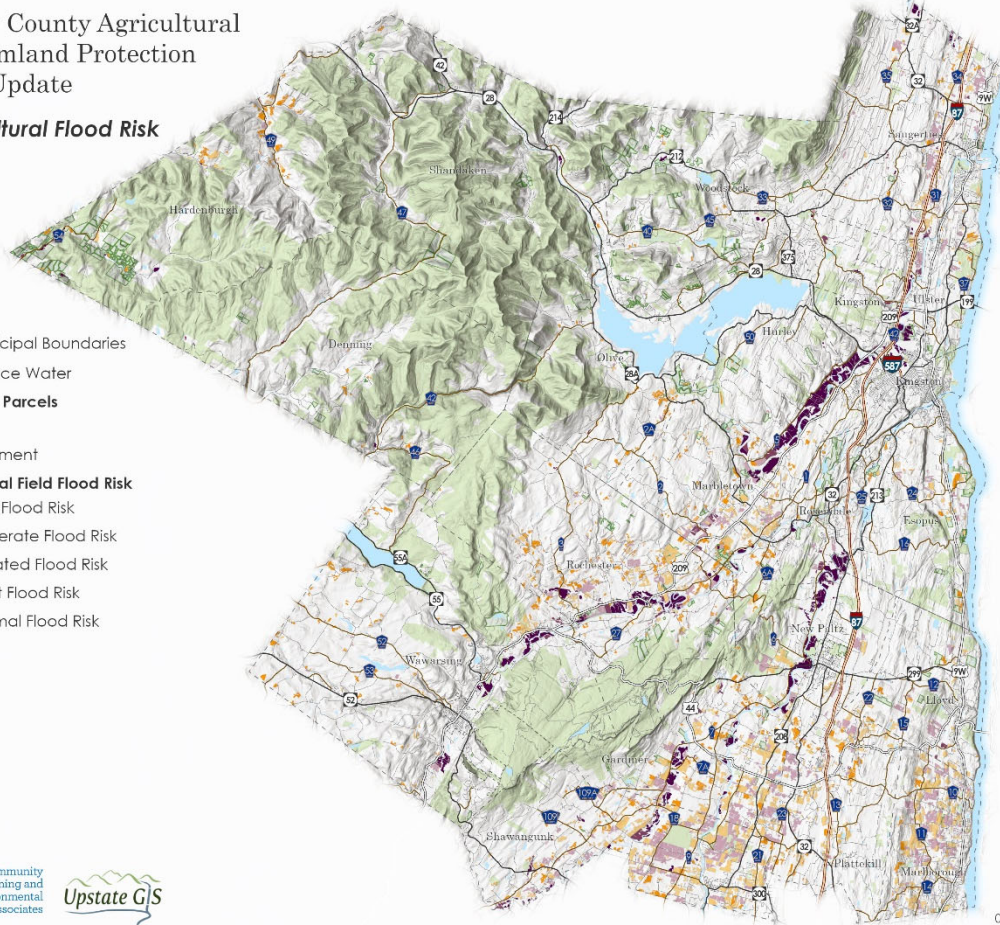
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DRAFT
5/15/2024

Ulster County Agricultural & Farmland Protection Plan Update

Agricultural Flood Risk

- Municipal Boundaries
- Surface Water
- Protected Parcels**
 - Fee
 - Easement
- Agricultural Field Flood Risk**
 - High Flood Risk
 - Moderate Flood Risk
 - Elevated Flood Risk
 - Slight Flood Risk
 - Minimal Flood Risk



Map is for planning purposes only and not to be used for navigation or legal determinations.



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Resiliency and Sustainability Goals

Foundational goals related to resiliency and sustainability include:

- Promote and support environmental sustainability and enhance climate resiliency of farms.

Resiliency and Sustainability Recommendations

The following recommendations are designed to address both challenges and opportunities related to resiliency and sustainability for farms in Ulster County. These are derived from public input, the Advisory Committee, and team consultants.

Those items identified as a priority strategy or action are identified with this icon and are further detailed in Chapter 9.



There is a diverse toolbox of strategies to help Ulster County farmers accomplish these goals. Some are practices that farmers are already implementing as part of best farming practices. Use of cover crops, adjusting nitrogen application rates, and use of tree cover or silvopasture systems for livestock are major examples of common climate adaptation methods.

A. Ulster County, farm-related agencies and organizations, and farmers should incorporate the following strategies into educational, technical, and funding programs. Highlights of strategies that are important to helping Ulster County agriculture adapt to climate change include:

1. Enhance Climate Resilience in Agricultural Practices:

- Implement Climate-Smart Agriculture: Promote and support the adoption of climate-smart agricultural practices, such as crop diversification, agroforestry, and integrated pest management, to enhance resilience to climate change.
- Increase Soil Carbon Sequestration: Encourage practices that increase soil organic matter and carbon sequestration, such as cover cropping, reduced tillage, and organic farming methods.



2. Improve Water Management:

- Promote Efficient Irrigation Systems: Support the adoption of water-efficient irrigation systems, such as drip irrigation and precision watering, to reduce water usage and enhance drought resilience.
- Develop Water Conservation Plans: Create and implement comprehensive water conservation plans to manage water resources sustainably and ensure availability during periods of drought.

3. Enhance Monitoring and Early Warning Systems:

- Develop Climate Monitoring Infrastructure: Invest in and expand climate monitoring infrastructure to provide accurate and timely data on weather patterns, soil moisture, and other critical indicators.
- Establish Early Warning Systems: Implement early warning systems for extreme

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weather events, such as heatwaves, floods, and frost, to help farmers prepare and respond effectively.

4. Support Research and Innovation:

- **Fund Climate-Related Agricultural Research:** Increase funding for research on climate change impacts on agriculture, including the development of climate-resilient crop varieties and innovative farming practices.
- **Promote Agricultural Innovation:** Encourage innovation in agricultural technologies and practices that enhance climate resilience, such as drought-resistant crops, precision agriculture, and renewable energy use on farms.

5. Facilitate Farmer Education and Training:

- **Provide Climate Adaptation Training:** Offer education and training programs for farmers on climate adaptation strategies, including best practices for managing climate risks and improving farm resilience.
- **Develop Extension Services:** Strengthen agricultural extension services to provide farmers with up-to-date information and technical assistance on climate-smart practices and technologies.

6. Enhance Policy and Regulatory Frameworks:

- **Integrate Climate Change into Agricultural Policies:** Ensure that climate change considerations are integrated into all relevant agricultural policies and plans, promoting a cohesive approach to climate adaptation and mitigation.
- **Advocate for Supportive Legislation:** Advocate for legislation and policies that support climate-resilient agriculture, including incentives for sustainable practices and funding for climate adaptation initiatives.

7. Promote Sustainable Land Use Practices:

- **Encourage Agroecological Practices:** Promote agroecological practices that enhance biodiversity, improve soil health, and reduce greenhouse gas emissions, such as agroforestry, permaculture, and regenerative agriculture.
- **Prevent Land Degradation:** Implement measures to prevent land degradation and promote soil conservation, such as erosion control, reforestation, and sustainable grazing practices.

8. Strengthen Community and Stakeholder Engagement:

- **Foster Collaboration and Partnerships:** Encourage collaboration and partnerships among farmers, researchers, policymakers, and community organizations to share knowledge and resources for climate adaptation.
- **Promote Community-Based Adaptation:** Support community-based adaptation initiatives that involve local stakeholders in developing and implementing climate resilience strategies tailored to their specific needs and contexts.

9. Increase Access to Financial Resources:

- **Provide Climate Adaptation Funding:** Establish funding programs and financial

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incentives to help farmers invest in climate adaptation measures, such as infrastructure improvements and new technologies.

- Develop Risk Management Tools: Create and promote risk management tools, such as crop insurance and disaster relief programs, to help farmers manage financial risks associated with climate change impacts.

10. Enhance Biodiversity and Ecosystem Services:

- Protect and Restore Natural Ecosystems: Support the protection and restoration of natural ecosystems, such as wetlands and forests, which provide critical ecosystem services and enhance agricultural resilience.
- Promote Pollinator Health: Implement measures to protect and promote the health of pollinators, such as bees, which are vital for crop production and biodiversity.

B. Promote, through education, training, and funding assistance, continued Ulster County farm participation in SWCD's Climate Resilient Agriculture program. Climate Resilient Agriculture is an active program funded through NYS Ag and Markets directed to Soil and Water Conservation Districts. USDA has a Climate Smart Farming program operating in NYS through NOFA-NY available to all farmers (not exclusively focused on organic farms). The USDA's Natural Resources Conservation Service (NRCS) has an extensive list of 27 climate resilient farming practices and provides assistance to farmers interested in them. These programs provide technical assistance and funding for conservation practices for water management, livestock grazing, building soil, crop diversification, and sequestering carbon. See Appendix 8. Specifically, work to implement the following strategies that are going to be helpful in Ulster County:

1. Enhance conservation tillage and SWCD programs:

- No Till.
- Maximize standing cover and residue retention after crop harvest
- Reduce soil compaction
- Use cover crops following harvest

2. Address nutrient/waste management.

3. Promote agroforestry.

4. Implement livestock heat abatement practices.

5. Diversify farm enterprises/species/varieties.

6. Develop programs and technical expertise to help farms develop best management practices to address a changing climate.

- Work with CCE, NRCS and SWCD to assist farmers in understanding, implementing, and accessing funding for climate adaptation methods.
- Promote climate resilient farming techniques and methods and offer educational programs to help farmers learn about these.

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7. Use the USDA Adaptation Resources for Agriculture as a framework to help farmers address climate change. This involves:
 - Defining farm management goals
 - Assess site-specific climate change impacts and vulnerabilities
 - Evaluate management objectives given projected impacts and vulnerabilities
 - Identify adaptation approaches and tactics
 - Monitor for effectiveness
8. Promote regenerative farming practices and consider switching to alternative rotations, commodities, or diversity of crops.
9. Many of the recommendations made in Chapter 6 - Farmland Characteristics and Land Use Patterns will also enhance resiliency and sustainability. Enhanced programs that protect farmland rather than convert land to other uses are critical to mitigate climate change and enhance agricultural activities.



Putney School, Farm in Summer

Chapter 8. Supportive Infrastructure

Background

Support infrastructure for agriculture encompasses the various physical, institutional, and organizational facilities and systems that enable the efficient functioning and development of agricultural activities. This infrastructure is critical for increasing productivity, ensuring sustainability, and facilitating the overall growth of the agricultural sector. These include:

1. **Transportation Networks:** Roads, railways, and ports that facilitate the movement of agricultural inputs (like seeds, fertilizers, and machinery) to farms and the distribution of agricultural produce to markets.
2. **Storage Facilities:** Warehouses, cold storage, and silos that help in storing crops and other agricultural products, preventing post-harvest losses and ensuring a steady supply to the market.
3. **Market Infrastructure:** Marketplaces, auction houses, and electronic trading platforms that provide venues for farmers to sell their produce, often including facilities for grading, weighing, and packaging.
4. **Processing Facilities:** Mills, slaughterhouses, and other processing units that convert raw agricultural products into consumable goods or value-added products.
5. **Financial Services:** Banks, cooperatives, and microfinance institutions that offer credit, insurance, and other financial products tailored to the needs of farmers and agribusinesses.
6. **Research and Development Centers:** Institutions that focus on agricultural research, developing new technologies, crop varieties, and farming practices to enhance productivity and sustainability.
7. **Extension Services:** Governmental and non-governmental organizations that provide training, education, and support to farmers, helping them adopt best practices and new technologies.
8. **Communication Networks:** Information and communication technologies (ICT) that provide farmers with timely information on weather, market prices, pest outbreaks, and other critical factors.
9. **Energy Supply:** Reliable and affordable sources of energy, such as electricity and fuel, necessary for operating machinery, irrigation systems, and processing facilities.

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10. **Regulatory and Policy Framework:** Government policies, regulations, and institutions that create an enabling environment for agricultural activities, ensuring fair trade practices, quality standards, and support mechanisms like subsidies and incentives.
11. **Education and Training Centers:** Institutions that offer agricultural education and vocational training to develop skilled labor in the agricultural sector.

These components collectively form the backbone of the agricultural sector, enabling farmers to increase productivity, reduce losses, and improve their livelihoods.

Ulster County is fortunate to have numerous agencies and nonprofits that are engaged in many aspects of agriculture. Foremost are Cornell Cooperative Extension, the Soil and Water Conservation District, NRCS, and farm-related organizations such as the Farm Bureau, Rondout Valley Growers Association (RVGA), and the Hudson Valley chapter of the National Young Farmers Coalition. The County has excellent access to transportation through the New York State Thruway and the Hudson River. Farm businesses such as the Hudson Valley Farm Hub and university research institutions like the Hudson Valley Research Lab (associated with Cornell University's College of Agriculture and Life Sciences) also provide crucial support for farmers.

In addition, other valuable sources of expertise can be tapped, e.g., USDA, American Farmland Trust, NOFA-NY (which does much more than organic certification and education), CALS (Cornell Ag & Life Sciences), the Glynwood Center, CRAFT, the NY Farm Viability Institute (NYFVI), HVADC, RVGA, and the Hudson Valley Farm Hub. Often, there are so many organizations and programs available that farmers have difficulty sorting through the options, knowing where to go for certain information, or not being aware of resources that could support their farm.

Because supportive infrastructure is so important to the success of farmers, this Plan includes a comprehensive resource guide to agencies and programs. **Appendices 9 and 10 offer information on the many agencies, organizations and programs that support all aspects of agriculture in the County.** These appendices, along with resources listed in Appendix 8 (climate-related resources), provide a one-stop-shop so that farmers and farm-related organizations and agencies can more easily access supportive infrastructure.

Because supportive infrastructure is a fundamental component required for meeting economic viability, farmland preservation and resiliency/sustainability goals, there is overlap between those chapters and this one. This chapter offers recommendations for several other key supportive infrastructures considered important in Ulster County.

Trends and Issues

Positive Trends

- CCE, SWCD, NRCS, along with other agriculture-related agencies and organizations exist to provide educational, research, and technical assistance to farmers.
- Good access to New York City and other urban areas including Kingston.
- Kingston YMCA Farm Project, NY Farm to School Institute (and its partners)
- FFA (Future Farmers of America) chapters still exist, although in a limited geography.
- Good access to the New York State Thruway and Hudson River transportation systems.
- Good water supplies for irrigation, and adequate rainfall.
- Farm Bureau, Rondout Valley Growers Association, the National Young Farmers Coalition, and other organizations support agriculture and provide educational opportunities that farmers can take advantage of.
- Availability and variety of food in the Hudson Valley: do not need to travel far to share new products with customers.
- Farmers markets, direct sales, agritourism, and other local market opportunities exist.

Issues and Challenges

- Concern that the County is losing talented growers and losing a knowledge base.
- Lack of understanding of agricultural practices among property owners, especially new landowners and people who own second homes in the County.
- Challenges facing BIPOC farmers include high costs, difficulty accessing farmlands, and racial discrimination.
- Lack of agricultural education programs that promote careers for young people and veterans in agriculture.
- Lack of diversity training.
- Current educational and training programs must be flexible and able to meet both current and future needs of the agricultural community. Education for the producer community and all stakeholders is critically important and should be strengthened in support of agriculture.
- Lack of general understanding of the role agriculture plays in the County.
- Farmers need more bricks and mortar infrastructure such as processing facilities, slaughterhouses, and distribution options.
- There is a lack of communication and coordination among various County departments and



Photo by Jim Schoonmaker

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other entities involved in agriculture within the County.

- There is a perception that the County has not addressed many of the challenges and barriers facing the agricultural community.

Supportive Infrastructure Goals

- Enhance collaboration and communication among all parties including farmers, farmland owners, local and County governments, and agricultural service and advocacy agencies and organizations.
- Enhance educational programs that expand public understanding of the important role agriculture plays in the County.
- Enhance outreach and involvement to attract and support the needs of BIPOC, veteran, new, and young farmers.

Supportive Infrastructure Recommendations


The following recommendations are designed to address both challenges and opportunities related to providing supportive infrastructure for farms in Ulster County. These are derived from public input, the Advisory Committee, and team consultants.

Those items identified as a priority strategy or action are identified with this icon and are further detailed in Chapter 9 and in Appendices 9, 10, and 11.



- A. The County, in partnership with Cornell Cooperative Extension and other agricultural support agencies and organizations, should promote strong ties with County school districts to enhance K-12 agricultural education.
1. Support the Kingston YMCA Farm Project and work to promote participation of more area farms in field trip opportunities for school children.
 2. Support and promote the NY Farm to School Institute (<https://finys.org/institute>) with County school districts. The Institute is “a year-long professional development opportunity for food service staff, educators, administrators, and community partners in New York schools to develop and refine their Farm to School programs, and to help bring more New York grown food into the cafeteria and classroom.” The Ellenville Central School District is a past participant; its partners included Ellenville Regional Hospital, the Rondout Valley Growers Association, and the ARC of Ulster-Greene.
 3. Encourage more schools to pursue the NY Agriculture in the Classroom curricula (<https://newyork.agclassroom.org/>).

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4. Create farming apprenticeships to involve new and young people into farming through FFA, 4-H, BOCES, etc., and college-level programs at SUNY New Paltz and SUNY Ulster; NRCS and SWCD can provide internships.
- B. Create a “**County Participate Ulster**” webpage for agriculture to engage and educate the public. Enhance awareness and education about agriculture to the non-farm community. Cornell Cooperative Extension, with continued support from Ulster County and other ag-related agencies and organizations, could take the lead on this:
1. Create programs to increase agricultural awareness for the public.
 - a. Continue the CCE and SWCD “Meat the Farmer Event” as an important method so the community can meet local food producers.
 - b. Develop marketing and educational programs that promote and educate the public about Ulster County farms/farming including community gardens, educational resources, and programs to promote farming practices among residents, including home gardening, beekeeping, and raising chickens
 - c. Highlight locally grown food’s nutritional value.
 - d. Promote programs that enhance public understanding of the diversity and ethnicity of farmers in the County to enhance knowledge and appreciation of their efforts and challenges.
 2. Widely distribute the Executive Summary from this Plan to farmers, municipalities, groups and agencies, and the public.
 3. Develop outreach specifically to local elected officials about agriculture, the role agriculture plays in their community, and the needs of agriculture. Increase dialogue between farmers and government officials. This should include recommendations for enhancing zoning and other land use regulations to be farm friendly. Help local governments understand and rectify regulatory roadblocks to farming. 
 4. Create education programs for landowners who lease or are interested in leasing land to farmers to help them understand land access, farming practices and needs, etc. Create model lease agreements, model subdivision and zoning laws, and more information about land use tools that promote and support agriculture
- C. Enhance technical training and education for farmers and agricultural businesses. (See also Chapters 5 and 6 for additional recommendations related to education and training in Ulster County.)
1. Support policy, advocacy, technical assistance, and funding opportunities for “Farmer First Solar” facilities. As Ulster County works to mitigate climate change, support renewable energy when it is oriented towards a “Farmer First Solar” perspective. Create a “Farmer First Solar” Implementation Committee to establish policies, model regulations, educational materials, and training related to renewable energy. This should focus on developing policies for renewable energy facilities designed to maintain prime and critical

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farmlands in agricultural production, as well as woodlands, and other locations such as within stream riparian areas to ensure that other critical resources in Ulster County are not adversely affected. Promote best design and management practices that allow for renewable energy facilities that can benefit farmers and farmland owners economically. Through County policy and coordination with local communities, work to ensure that new renewable facilities are sited and managed in a way that:

- a. Does not reduce prime farmland soils and important soils of statewide importance
 - b. Does not reduce farmland woodlots that support the farm and the ecology of the area;
 - c. Does not impact river, stream and river riparian areas;
 - d. Requires renewable energy designs to incorporate agricultural production, such as crop or livestock production underneath solar panels¹³;
 - e. Uses native pollinator-friendly seeding and landscaping;
 - f. Supports and expands opportunities for sheep and grazing animal farmers.
2. Enhance educational efforts aimed at local officials, farmers, residents, and property owners about the NYS Ag District program, agricultural assessments, and the need for farm-friendly land use regulations.
 3. Provide educational programs specifically designed for new, young, veteran or entering farmers in Ulster County.
 4. Provide training and technical expertise to help farmers develop succession and transition plans. While raising awareness about the *need* for such plans is important, it is critical to work directly with farmers to aid them in developing succession and transition plans. This would include creating and supporting partnerships with area land trusts, organizations, attorneys, and others who have expertise in this topic and who can continue to work one-on-one with farmers.
 5. For farmers with direct sales and who participate in farmers markets, provide assistance to help them learn about, navigate, and implement Federal food system programs.
 6. Promote climate resilient farming techniques and methods and offer educational programs to help farmers learn about them, including continuing SWCD and CCE's Soil Health Field Days.
 7. Promote internships and mentorships to support the next generation of farmers; involve legacy farmers to train beginning farmers.

¹³ See <https://www.nyserda.ny.gov/PutEnergyToWork/Industry-Energy-Solutions/Agriculture/Agrivoltaics> and <https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/ny/Put-Energy-To-Work/Grazing-Ready-Solar-Facilities.pdf> and <https://solargrazing.org/wp-content/uploads/2022/01/Solar-Multiuse-Farming-Practices-Fact-Sheet-2019-v3.pdf>

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8. Provide ongoing training to help farmers grow, process, and market their products. This goes beyond helping farmers navigate and identify relevant local, county, state and federal programs that could aid their farm operation: Farmers need sustained one-on-one support as they apply for, implement, and administer programs, and later, report on progress.
9. Create programs to attract and involve veterans in coming to Ulster County to farm.

D. Pursue the development of farmworker housing.

1. Evaluate the feasibility of developing a suitable site in Ulster County as a pilot farmworker housing project.



The Farmer Housing Working Group is a network of Hudson Valley farmers, affordable housing organizations, community land trusts, cooperative development groups, farm service providers, and members of local government that came together to understand and address the need for affordable housing for workers on small farms. Efforts to date have included a farmer housing needs survey and a series of online “community learning sessions” to present research findings and open community dialogue. Project leads are currently seeking additional funding to continue their work by pursuing several development pathways and executing a campaign to increase awareness and funding for farmer housing at the local, state, and federal government levels. The group is most interested in the development of duplexes and triplexes to meet the needs of farmers surveyed, with construction expected to be on “suitable sites in towns with favorable zoning codes.”

The efforts of the Farmer Housing Working Group could be further supported by identifying possible sites in Ulster County and working with an affordable housing developer or qualified nonprofit. Since several nonprofit farms indicated interest in building housing for their workers, another alternative would be providing development support to these farms.

Available assistance for farmworker housing includes low-interest loan programs offered by the NYS Division of Housing and Community Renewal, Farm Credit East, and USDA Rural Development.

2. Add farmworker housing to the list of project types eligible for support through Ulster County’s existing Housing Action Fund. Currently, farmworker housing is not listed as an eligible project.
3. When the Ulster County Housing Action Plan, developed in 2021, is updated, include information on farm employment and farmworker housing and provide recommendations to address the affordable housing needs of farm employees and laborers as well as farm families.
4. Educate municipal leaders and planning board members on New York State Agriculture and Markets rules related to farmworker housing, and assist communities in updating local

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zoning to allow for farmworker housing within NYS Agricultural Districts. Manufactured homes, modulares, traditional stick-built and other home types should be allowed for farmworker housing.



Chapter 9. Implementation

Action Plan

This Plan is meant to provide guidance for all those involved in the agricultural sector. It provides a toolbox of ideas and actions that can be implemented over time and offers a strategy for who, how, and when those strategies can be put to work. The goal is to improve agricultural opportunities, expand the agricultural economy, and conserve important farmlands and landscapes in Ulster County.

The Plan also provides:

- Guidance to the County, towns and partners on priority projects needed to support agriculture;
- A framework for the County, towns, partners and interested landowners to promote farming, agribusinesses, agritourism, and local food systems in the County;
- Guidance on obtaining funding to implement actions recommended in the Plan; and
- A large inventory of data, maps, and resources to help implement priority actions.

Roles and Responsibilities

There is no one silver bullet for protecting farmland, for enhancing or diversifying existing farms, or for promoting new agricultural operations. Agriculture and the agricultural economy are complex and influenced by a host of factors, many of which are outside local control. A wide variety of farms and farmlands in Ulster County are owned by an even wider variety of families and individuals that have various needs and goals. Thus, the toolbox identified in this Plan is not only diverse, but requires integration, cooperation and collaboration in order to address as many of these complexities as possible.

Ulster County's toolbox must include maintenance of existing programs along with the implementation of new initiatives as recommended in this Plan. The County currently has a wide range of successful programs designed to help farmers grow their operations and in turn, ensure that their land is not converted to non-farm uses. The overall infrastructure to support these programs is in place: Cornell Cooperative Extension, Ulster County SWCD, federal NRCS, and a myriad of groups and organizations focused on agriculture and farming. Further, agriculture has support from the public.

With this Plan, County-level support actions are identified. This Plan details trends facing agriculture in the County, challenges and barriers, and the many opportunities that exist to enhance farming, expand markets, and make farms more resilient and successful. There are many exciting and realistic opportunities to ensure that agriculture remains a significant part of Ulster

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County's economy, landscape, and character.

However, there are critical components for successful implementation to realize these opportunities. First and foremost is to recognize the need for, and then to improve, coordination, collaboration, leadership, and funding. As no one tool described in this Plan will solve all the issues, no one organization working alone will suffice.

The County should take a primary role in implementing this Plan by providing policy, direction, leadership, and in some cases, funding to set the stage and expectations. There are many other important players, however, that will also have significant roles. These include County agencies, local municipalities, the many agriculture-related organizations that serve farmers in Ulster County, and the farmers themselves.

Specific agencies and groups have been identified in this Plan as having leadership or technical skills needed to implement the strategies. Key players expected to be involved in implementing this plan will be the Cornell Cooperative Extension Ulster County; Ulster County Soil and Water Conservation District; Hudson Valley AgriBusiness Development Corporation; local land trusts; Ulster County Departments of Planning, Tourism, and Economic Development; and many others.

With this foundation, the following are recommended implementation steps:

1. Under the leadership and direction of the County, appoint an ***Ulster County Agricultural Coordinating Council***, made up of representatives from Ulster County SWCD, Cornell Cooperative Extension Ulster County, Ulster County Departments of Planning, Tourism, and Economic Development, NRCS, and Farm Bureau to work together on the implementation of this Plan.

The Agricultural Coordinating Council will serve as the leadership team for plan implementation. It will provide a critical mechanism to ensure collaboration, coordination, and communication among the public and private organizations that support agriculture in Ulster County. While each of these entities has its own mission, it is vitally important to eliminate "silos," reduce duplication of effort, and maximize the resources available to attain the goals and vision outlined in this Plan.

The Agricultural Coordinating Council will be responsible for establishing an annual work plan to implement actions using the priority strategies identified in this Plan. The work plan will describe the specific projects or initiatives to be pursued in the coming year and will assign specific tasks to the organizations represented on the Council. It will also include a budget for each initiative. The Council will pursue local, state, federal, and private funding to support the programs described in the annual work plan. Additionally, a year-end report should be prepared for the County Legislature and County Executive detailing progress made and challenges faced over the year along with an outline of next years' steps and funding needs.

2. To enhance their capacity to implement the strategies recommended in this Plan, increase Ulster County's financial support to both CCE Ulster County and the Ulster County SWCD.

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Additional Coordination Tasks

Ulster County has a plethora of agencies and organizations that provide financial and technical assistance and educational programs to farmers, but additional efforts are needed to make the agricultural community aware of these resources. Toward that end, it is recommended that the Agricultural Coordinating Council consider assigning to one or more of its members the responsibility for activities such as:

- Creating an e-mail list and providing an email blast to announce upcoming funding opportunities and educational workshops
- Developing a farmer resource directory that lists public agencies and private organizations in Ulster County and/or the Hudson Valley and the agriculture-related services that they offer
- Hosting an annual or semi-annual event for farmers tied to major grant announcements and/or the ability to meet with elected officials
- Hosting an event where farm owners can meet one-on-one with various service providers to learn about and navigate programs

These agencies have considerable strengths and expertise critical to implementing various aspects of this Plan, but they need additional funding and/or staff. The additional financial support should be tied to the implementation of actions identified in this Plan, with the expectation that:

- a. Additional funding provided by the County will be used to support the programs and actions needed to implement this Plan or in future updates to the Plan. This should be formalized in a memorandum of understanding that describes the tasks to be performed.
 - b. Both agencies will report to the County on an annual basis detailing the accomplishments made in relation to meeting the vision, goals, and needs identified in this Plan or any future updates to the Plan.
3. Ensure that this Plan (or future updates) becomes the “road map” for enhancing agriculture in Ulster County for all County agencies. Ensure that all departments and organizations are made aware of this plan and its importance to the economy, environment, character, and quality of life in Ulster County.
 4. Continue to fund and support the Hudson Valley AgriBusiness Development Corporation (HVADC) in its efforts to address agricultural economic development needs and provide farms and food businesses with financial and technical assistance. HVADC should report to the County on an annual basis showing accomplishments made in assisting farmers and agribusinesses in the County and outlining programmatic directions for the upcoming year.
 5. Review this Plan periodically: every 5-7 years with possible revisions and updates. The Plan should be dynamic and able to change as appropriate to incorporate and take advantage of new science, new conditions, new laws, and new opportunities.

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Funding and Resources

This Plan recognizes that while some initiatives can be implemented with existing staff and resources from Ulster County and its organizational partners, additional support will likely be required to finance projects involving building construction (e.g., a food hub, meat processing facility, farmworker housing), land acquisition, or the creation of new funding mechanisms (such as a revolving loan fund or microgrant program). Funding is available from numerous programs administered by the U.S. Department of Agriculture, the NYS Department of Agriculture and Markets, the NYS Division of Housing and Community Renewal, and Farm Credit East, to name a few sources. There are also nonprofit organizations and foundations that support local food and farm systems. See Appendix 10 for more detail on additional funding sources that should be explored.

Monitoring and Evaluation

To continue the County's leadership and support of agriculture, monitoring and evaluation of program implementation, accomplishments and effectiveness should be an expectation. County agencies including Planning, Economic Development, and Tourism all have roles and programs that intersect with agriculture. Each should report annually to the County Legislature and County Executive on progress made, challenges faced, and program support needed to implement this Plan. Likewise, organizations receiving County funding and support such as Cornell Cooperative Extension, SWCD, HVADC or others should also monitor effectiveness and report to the County on an annual basis.

Priority Actions

The Ulster County Agricultural and Farmland Protection Plan Advisory Committee members worked to identify priority actions to move forward. While all of the recommended actions, strategies and policies included in this Plan hold promise as tools in the "enhancement" toolbox, Committee members felt the following seven actions were a priority to begin implementing.

These priorities include initiating marketing and promotion of agritourism; providing a revolving loan fund to enhance financial assistance; helping small farms via establishment of a food hub; initiating new funding mechanisms at the County level specifically to finance the acquisition and management of farmland and the purchase of development rights; addressing the need for farmworker housing; expanding climate-resiliency farming practices, and developing new outreach to local elected officials to enhance local policies and farm-friendly regulations. The tables on the following pages outline these priority strategies.

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Priority #1:	
Create a website, or a series of pages on the Ulster County website, dedicated to promoting local farms.	
Objective(s):	
To enhance marketing and promotion of agritourism and local farm products.	
Action Steps:	
<ol style="list-style-type: none"> 1. Meeting of Ulster County Agricultural Coordinating Council to discuss project scope and identify entity or entities to lead the effort and host the site. 2. Review examples of websites dedicated to promoting local farms in other counties. 3. Develop narrative outlining project objectives, potential features, and content. It is anticipated that much of the content, at least initially, will be based on the Ulster County Farms and Food Guide being developed by CCE. 4. Develop and issue a Request for Proposals for a web designer. 5. Review and evaluate proposals received. 6. Select a web designer to create the website and update as needed (annually or semi-annually). 	
Lead Agency or Organization:	Ulster County Agricultural Coordinating Council
Potential Partners:	Ulster County Tourism
Estimated Cost Range:	Up to \$15,000
Potential Funding Source(s):	Existing department and organization resources, private foundations
Timeframe:	Short-Term (within one year)
Page Number in Plan:	28

Websites That Promote Local Farms and Food: A Few Examples

Homegrown Frederick (<https://homegrownfrederick.com/>) is an ongoing initiative by the Office of Agriculture in Frederick County, Maryland to celebrate and promote local agriculture. Its mobile- and user-friendly website connects consumers and tourists with local farms, craft beverage producers, and farmers' markets. Users can search for farms by product category and access their websites.

An online guide to local foods in five counties (<https://buylocalfoodny.org/>) was developed by Cornell Cooperative Extension of Tompkins County with funding from a private foundation. The site is maintained by CCE educators in each county. It lists more than 400 farms and producers, and can be searched by name, county, product type, and features (e.g., certified organic). Each listing provides a description of the farm, its products, and where to buy them, with addresses, phone numbers, and individual websites. The location of each farm is shown on a Google Map.

Local farms and agricultural businesses in Worcester County, Massachusetts are featured on the website of Central Mass Grown, a non-profit organization made up of farmers, buy-local advocates, and community leaders (<https://www.centralmassgrown.org/directory>). Users can click on a map or on individual listings for information. The directory can be filtered or organized by business name, product, region, and other characteristics.

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Priority #2:	
Create a County Revolving Loan Fund to provide loans for farm expansion and diversification projects.	
Objective(s):	
To provide financial and technical assistance, agricultural education, and training to farmers and farm business owners.	
Action Steps:	
<ol style="list-style-type: none"> 1. Secure funding for the Revolving Loan Fund. The fund may be capitalized by a mix of public and private sources, but a <i>local</i> public source is preferred, as many state and federal sources have job creation and retention requirements that farms may be unable to meet. 2. Establish the purpose of the program and make decisions about how the loan fund will operate. 3. Develop program guidelines for the Revolving Loan Fund that include eligible applicants, allowed uses of funds, loan amounts and terms, match requirements (if applicable), application review and approval processes, etc. 4. Develop loan application forms and checklists. 5. Identify administrative duties and staffing needs associated with the program. 6. Designate staff or establish a committee to review and approve loan applications. 7. Promote the Revolving Loan Fund. 8. Provide loans. 	
Lead Agency or Organization:	Ulster County Planning and/or Economic Development
Potential Partners:	Ulster County Agricultural Coordinating Council
Estimated Cost Range:	Varies, but could be capitalized initially with \$500,000 to \$750,000
Potential Funding Source(s):	County funds, private foundations, possibly financial institutions
Timeframe:	Medium-Term (within one to three years)
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Growing the Agriculture Industry Now! Loan Fund

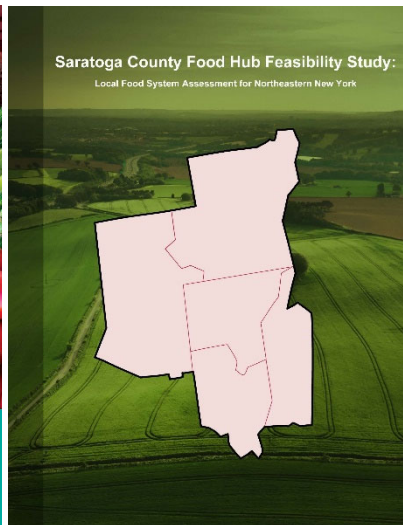
Genesee County, New York has established a revolving loan fund that offers gap financing to active farms and agriculture-related businesses (e.g., food processing) to adopt new technologies, diversify, or expand. Eligible projects include farm-based retail and wholesale operations, value-added processing, and investments in renewable energy, production, and harvesting equipment. Loans range from \$25,000 to \$200,000, are amortized for up to 10 years, and have an interest rate of 1%. Funds must be combined with bank approved financing or project development “equity” of at least 10% of the total project cost.

Southern Maryland Revolving Loan Fund for Agriculture

Administered by MARBIDCO (Maryland Agricultural & Resource-Based Industry Development Corporation) on behalf of the Southern Maryland Agricultural Development Commission, this program offers subsidized low-interest loans to farmers who are often unable to access financing from traditional commercial lenders. It aims to expand and promote a viable market-driven, sustainable, and profitable agricultural community in a five-county region. Loans range from \$10,000 to \$20,000, are amortized for 1-4 years, and have an interest rate of 4.5%. The program includes an incentive for borrowers in good standing to have 20-25% of the loan amount forgiven at the end of the loan term. Funds are available for a variety of uses, such as the purchase of equipment for value-added production, acquisition of livestock, and upgrades for the safe handling of produce required by the Food Safety Modernization Act.

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Priority #3:	
Explore the feasibility of developing a food hub, or elements of a food hub, such as a cold storage facility or a small-scale processing and co-packing facility.	
Objective(s):	
To help small farms get their products into retail, wholesale, and institutional markets.	
Action Steps:	
<ol style="list-style-type: none"> 1. Review study parameters recommended in this Plan; review completed food hub feasibility studies available online as needed. 2. Secure funding for an Ulster County food hub feasibility study. 3. Develop and issue a Request for Proposals, outlining study requirements and desired qualifications. 4. Review and evaluate proposals received. 5. Select and hire an experienced company or organization to prepare the feasibility study. 6. Review completed study. 7. Next steps to be determined based on study findings and recommendations. 	
Lead Agency or Organization:	Ulster County Economic Development
Potential Partners:	Ulster County Planning, CCE, SWCD
Estimated Cost Range:	\$25,000 to \$100,000
Potential Funding Source(s):	USDA Local Food Promotion Grant Program, Empire State Development Strategic Planning and Feasibility Studies Program
Timeframe:	Medium-Term (within one to three years)
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Priority #4:	
Consider developing new funding mechanisms at the County level specifically to finance the acquisition and management of farmland and the purchase of development rights.	
Objective(s):	
To increase funding, incentives, and financial planning assistance to farmers (to help farmers access, stay on and invest in their land).	
Action Steps:	
<ol style="list-style-type: none"> 1. Define objectives and work with Ulster County farmers, land trusts and ag-related agencies to clarify purposes and goals for such a program. Determine the primary purpose of the funding mechanism (e.g., preserving prime farmland, maintaining rural character, helping new farmers, supporting local agriculture). Establish specific goals, such as the number of acres to preserve, key areas of focus, and funding targets. 2. Determine eligible activities: Decide whether funds will be used exclusively for purchasing development rights, acquiring land, rental, or providing grants for management and stewardship. 3. Consider the need to conduct a financial feasibility study to estimate funding needs revenue sources. 4. Identify and secure funding sources through a variety of funding mechanisms such as dedicated taxes, bonds, conservation fees, or PILOTs. 5. Work to leverage matching grants: Identify state and federal programs that match local funds and collaborate with land trusts and other groups to secure additional funding and technical assistance. 6. Create a dedicated county farmland enhancement fund that is structured for transparency, with specific earmarks for acquisition, management, and stewardship. 7. Build public and stakeholder support: Engage farmers, landowners, local government officials, environmental groups, and community leaders and incorporate their feedback into program design and prioritize local support for funding proposals. Launch a campaign to inform the public about the benefits of farmland preservation. Build a coalition of diverse stakeholders to advocate for the initiative. 8. Seek legislative approval. 9. Develop program guidelines and policies that outline eligibility criteria, application processes, and program administration. Specify how properties will be prioritized, monitored, and managed. Use the Critical Farmlands Map included in this Plan as a guideline. 10. Decide which agency or organization will serve as the program administrative body for the program and assign responsibilities for administering funds, evaluating projects, and monitoring compliance. 11. Monitor, evaluate, and adapt: Regularly assess program effectiveness and adjust as needed. Set up performance metrics to evaluate the impact on farmland preservation, community benefits, and program sustainability. 	
Lead Agency or Organization:	Ulster County Planning
Potential Partners:	All land trusts operating in Ulster County, NYS Agriculture & Markets
Estimated Cost Range:	To be determined based on program goals. Projects that fund start-ups and rentals, for example, are very different from those using purchase of development rights.
Potential Funding Source(s):	Grants, general tax dollars, fees, state and federal funds, sales taxes, bonds, utility or service fees, private and nonprofit sources, green banking, and other public/private partnerships
Timeframe:	Medium to Long-Term (start within 1 year, initiate within 3 years)
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Priority #5:	
Pursue the development of farmworker housing on a suitable site in Ulster County as a pilot project.	
Objective(s):	
To address the affordable housing needs of workers on small farms; enhance the resiliency of agricultural operations.	
Action Steps:	
<ol style="list-style-type: none"> 1. Identify stakeholders interested in participating in the effort to develop farmworker housing in Ulster County. Include members of the existing Farmer Housing Working Group, as well as organizations that represent farmers and farmworkers. 2. To fully evaluate the need for and interest in farmworker housing in Ulster County, conduct a survey and/or interview local farm owners and operators. 3. Inventory existing farmworker housing and identify locations within the County where hired farmworkers are concentrated. 4. Develop a plan of action for addressing the identified needs. Include roles and responsibilities of stakeholders and partners, timelines, funding requirements, approaches, project types, etc. 5. Based on the needs assessment and action plan, identify a pilot project to pursue and seek funding. 6. Next steps to be identified in the action plan. 	
Lead Agency or Organization:	Ulster County Planning
Potential Partners:	CCE, SWCD, Farm Bureau, RUPCO, local farmers
Estimated Cost Range:	TBD (note that the USDA Farm Labor Housing Program averages about \$34,000 per unit)
Potential Funding Source(s):	USDA Farm Labor Housing Program, NYS HCR Farmworker Housing Program, Farm Credit East
Timeframe:	Long-Term (within more than 3 years)
Page Number in Plan:	70

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Priority #6:	
Implement climate-smart agriculture and increase soil carbon sequestration.	
Objective(s):	
To enhance climate resilience in agricultural practices.	
Action Steps:	
<ol style="list-style-type: none"> 1. Promote policies at the County level that reward carbon sequestration, soil health improvements, and water conservation, such as carbon farming programs or nutrient trading schemes. 2. SWCD and CCE and other agricultural advisors should continue to collaborate to support implementation and provide research-based guidance. Emphasize Climate-Smart Agricultural Practices in SWCD and CCE programs including no-till farming, use of cover crops, crop rotations and diversification, agroforestry, silvopasture, alley cropping, or windbreak systems as appropriate, use of perennial crops, enhanced grazing, helping farmers adopt precision agricultural technologies, increase water management capacity, Irrigation Efficiency Technologies, and buffers. 3. The County should work towards establishing funds to support farmers in adapting to and recovering from extreme climate events, such as droughts or floods and increase funding to SWCD to undertake these projects. 4. Foster community and knowledge networks and establish events such as field days or organized demonstrations and training on regenerative practices, soil carbon monitoring, and water management. Build capacity and promote knowledge sharing. 5. Access funding from the USDA's Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), or Regional Conservation Partnership Program (RCPP) to fund these efforts. 6. Evaluate how farmers can participate in carbon credit markets where farmers are paid for sequestering carbon in soils. 7. Promote technological innovations such as encouraging the development of low-cost soil carbon measurement tools, drones for monitoring, and data-driven decision support systems. 8. Increase funding availability for climate-smart projects through green bonds, impact investments, or dedicated agricultural resilience funds. 	
Lead Agency or Organization:	Ulster County Soil and Water Conservation District
Potential Partners:	CCE, farmers' organizations such as Farm Bureau
Estimated Cost Range:	TBD
Potential Funding Source(s):	USDA NRCS programs such as EQIP, CSP, RSPP, USDA Climate-Smart
Timeframe:	Short-Term (within one year); start immediately and work to enhance efforts on an ongoing basis
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Priority #7:	
Develop outreach specifically to local elected officials about agriculture, the role agriculture plays in their community, and the needs of agriculture. Increase dialogue between farmers and government officials. This should include recommendations for enhancing zoning and other land use regulations to be farm friendly. Help local governments understand and rectify regulatory roadblocks to farming.	
Objective(s):	
To provide model farm-friendly zoning definitions, uses, development standards, and zoning methods to be considered by local towns to enhance farm-friendliness and review processes of local regulations; to provide data specific to each locality; to provide planning board and ZBA training and enhance awareness of land use and development impacts on agriculture.	
Action Steps:	
<ol style="list-style-type: none"> 1. Use this plan to assess existing zoning and identify barriers. Use the Audit in this Plan to identify general plan and regulatory areas needing enhancements that would promote agricultural land uses. 2. Create model farm-friendly definitions, procedures and regulations. 3. Provide town-level data and maps from this plan and from other available sources to each town in the County and encourage them to use them as their planning database to support local comprehensive, farmland or other strategic planning. 4. Conduct regular training within Ulster County for local planning boards, ZBAs, code enforcement officers, zoning enforcement officers, assessors, and officials on the unique needs of the farming community. 5. Engage consultants and local experts to aid the Planning Department with these tasks. 6. Ensure continuous dialogue between the agricultural community, the planning department, and town policymakers to adapt zoning laws as agricultural needs evolve. 	
Lead Agency or Organization:	Ulster County Planning
Potential Partners:	CCE, New York Planning Federation, NYS Department of State, area Land Trusts, Farm Bureau, town officials
Estimated Cost Range:	\$50,000
Potential Funding Source(s):	NYS grants, NYS Department of Agriculture and Markets, Ulster County Legislature
Timeframe:	Short Term (within one year)
Page Number in Plan:	68





Appendix 1. Maps

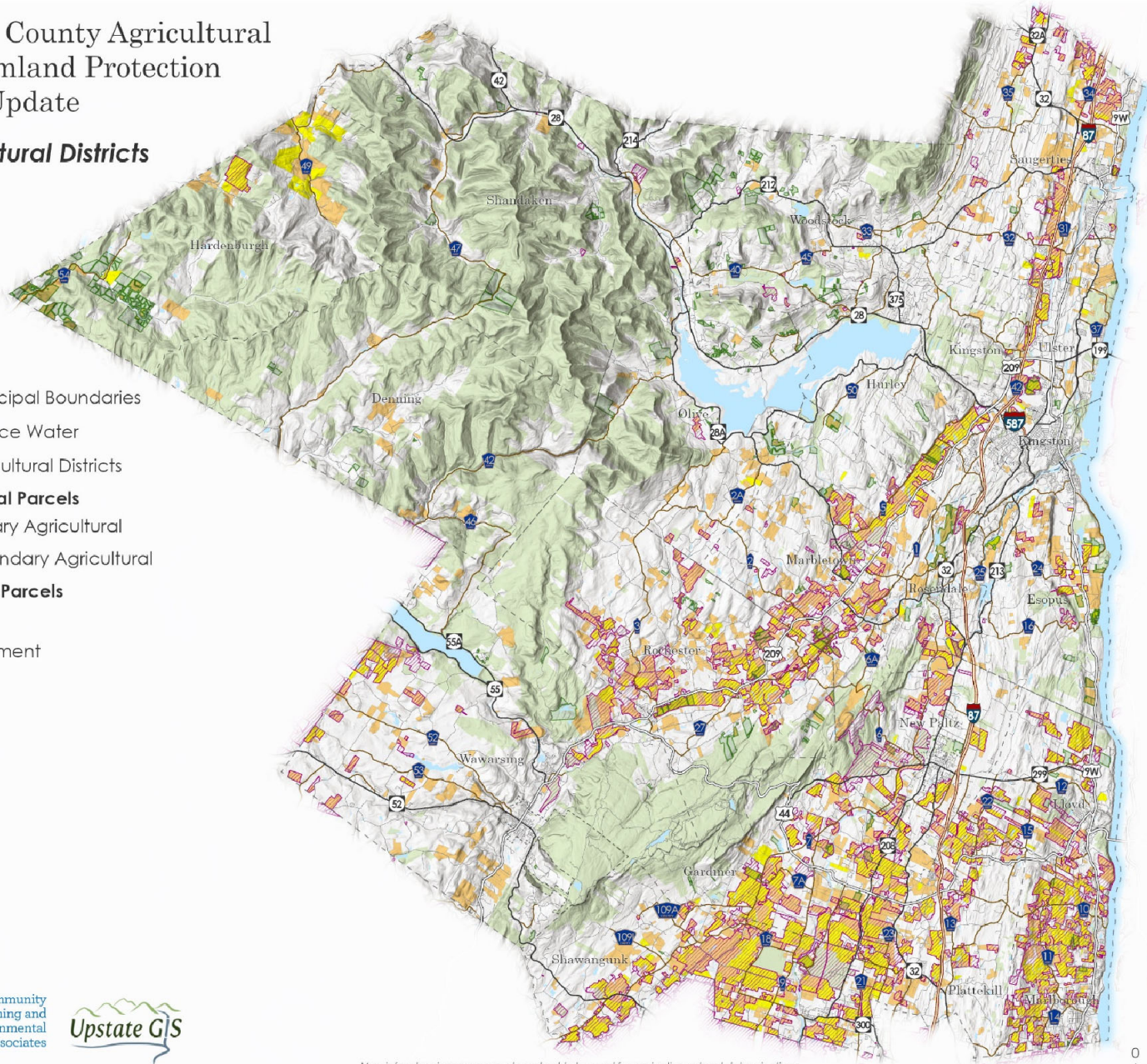
The following maps are included:

- Agricultural Districts
- Agricultural Flood Risk
- Agricultural Land in Production
- Agricultural Soils
- Agricultural Parcels
- Agricultural Types
- Change in Assessment 2014-2023
- Farmland Protection Priority Areas and Parcels
- Farmland Protection Priority Parcels
- Potential Rented Land
- Recent Development
- Watersheds

Ulster County Agricultural & Farmland Protection Plan Update

Agricultural Districts

-  Municipal Boundaries
-  Surface Water
-  Agricultural Districts
- Agricultural Parcels**
 -  Primary Agricultural
 -  Secondary Agricultural
- Protected Parcels**
 -  Fee
 -  Easement



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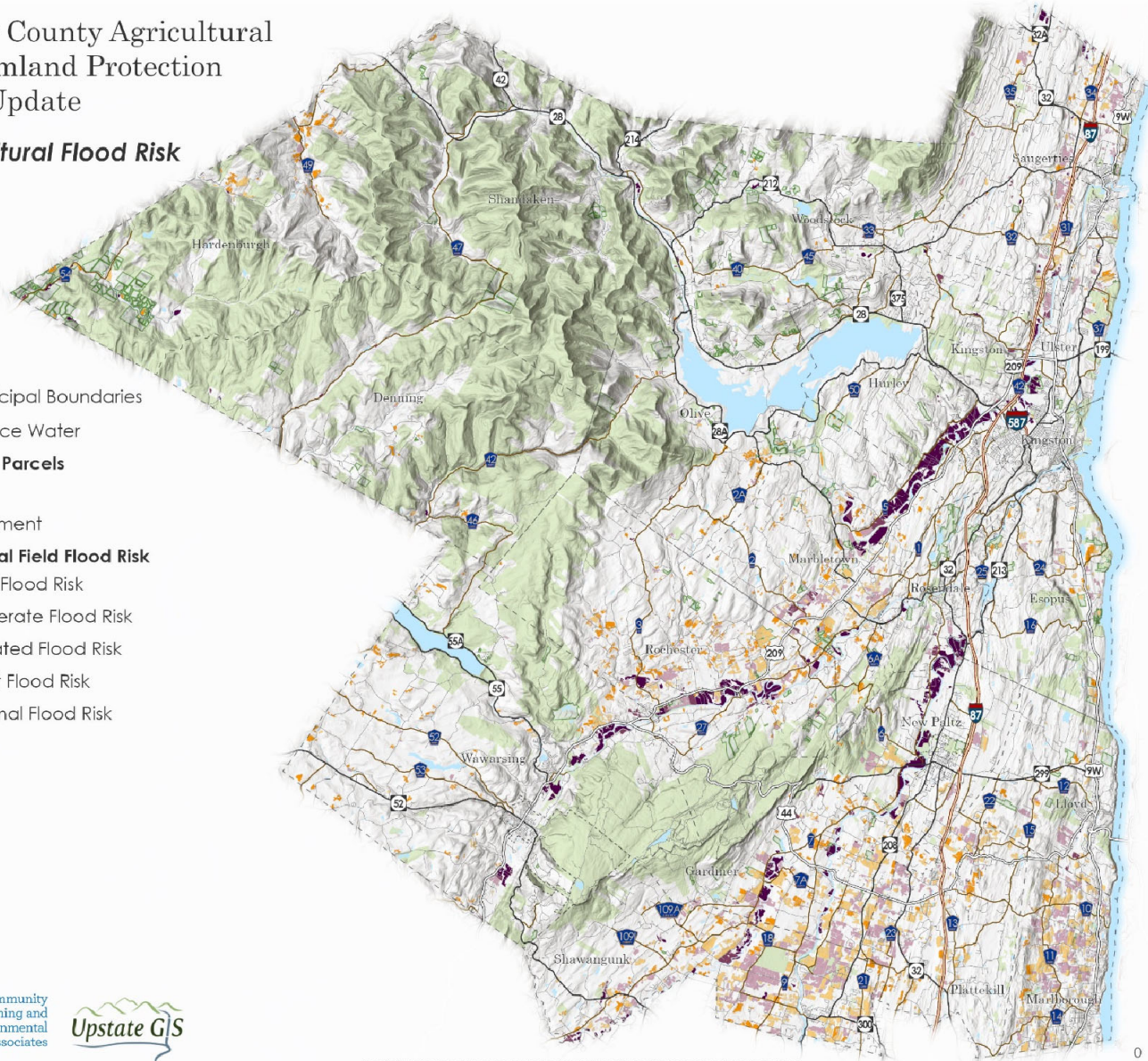
Map is for planning purposes only and not to be used for navigation or legal determinations

Ulster County Agricultural & Farmland Protection Plan Update

Agricultural Flood Risk

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-  Municipal Boundaries
-  Surface Water
- Protected Parcels**
 -  Fee
 -  Easement
- Agricultural Field Flood Risk**
 -  High Flood Risk
 -  Moderate Flood Risk
 -  Elevated Flood Risk
 -  Slight Flood Risk
 -  Minimal Flood Risk



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0 2 4 Miles

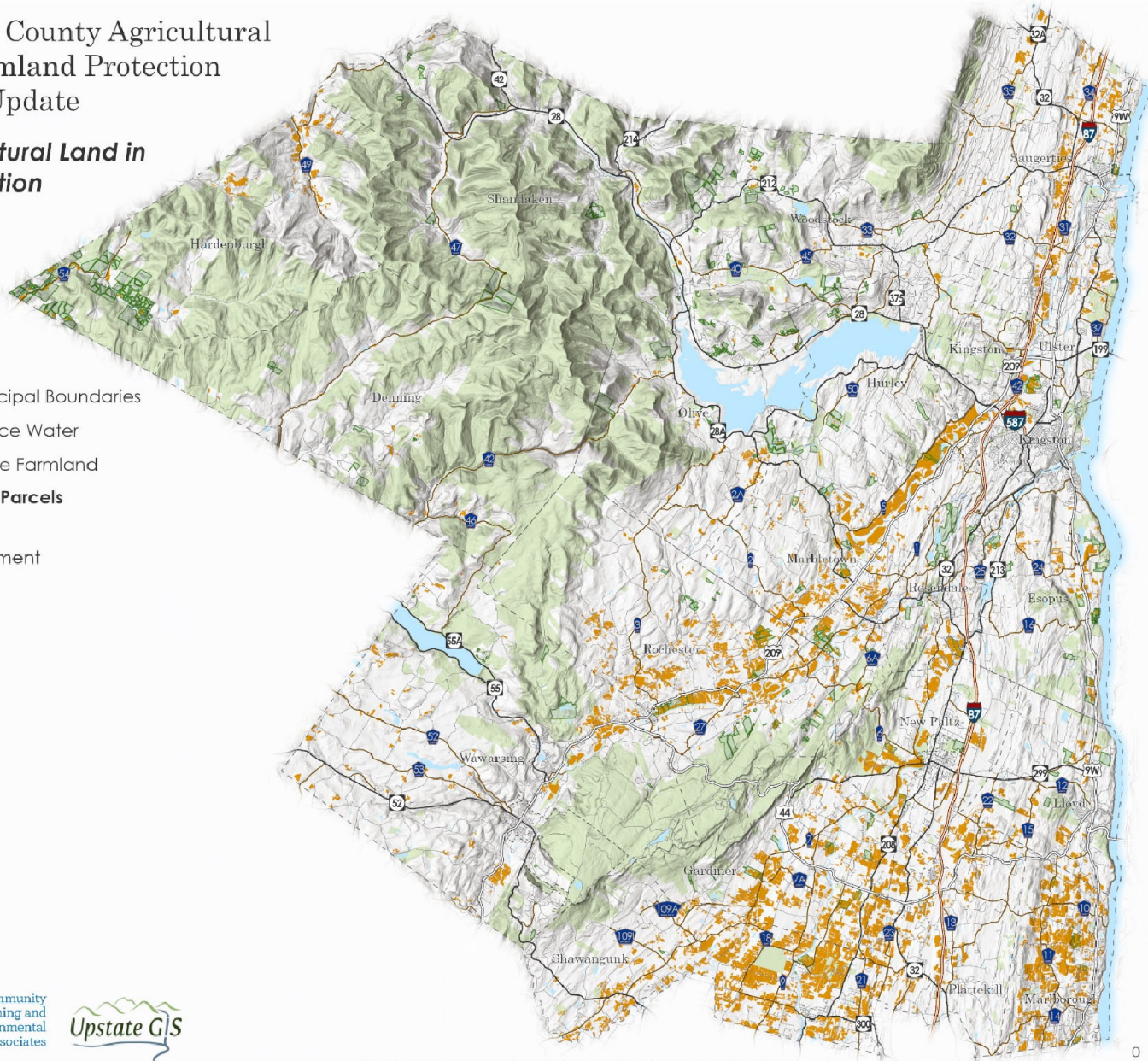
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Ulster County Agricultural & Farmland Protection Plan Update

Agricultural Land in Production

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-  Municipal Boundaries
-  Surface Water
-  Active Farmland
- Protected Parcels**
-  Fee
-  Easement








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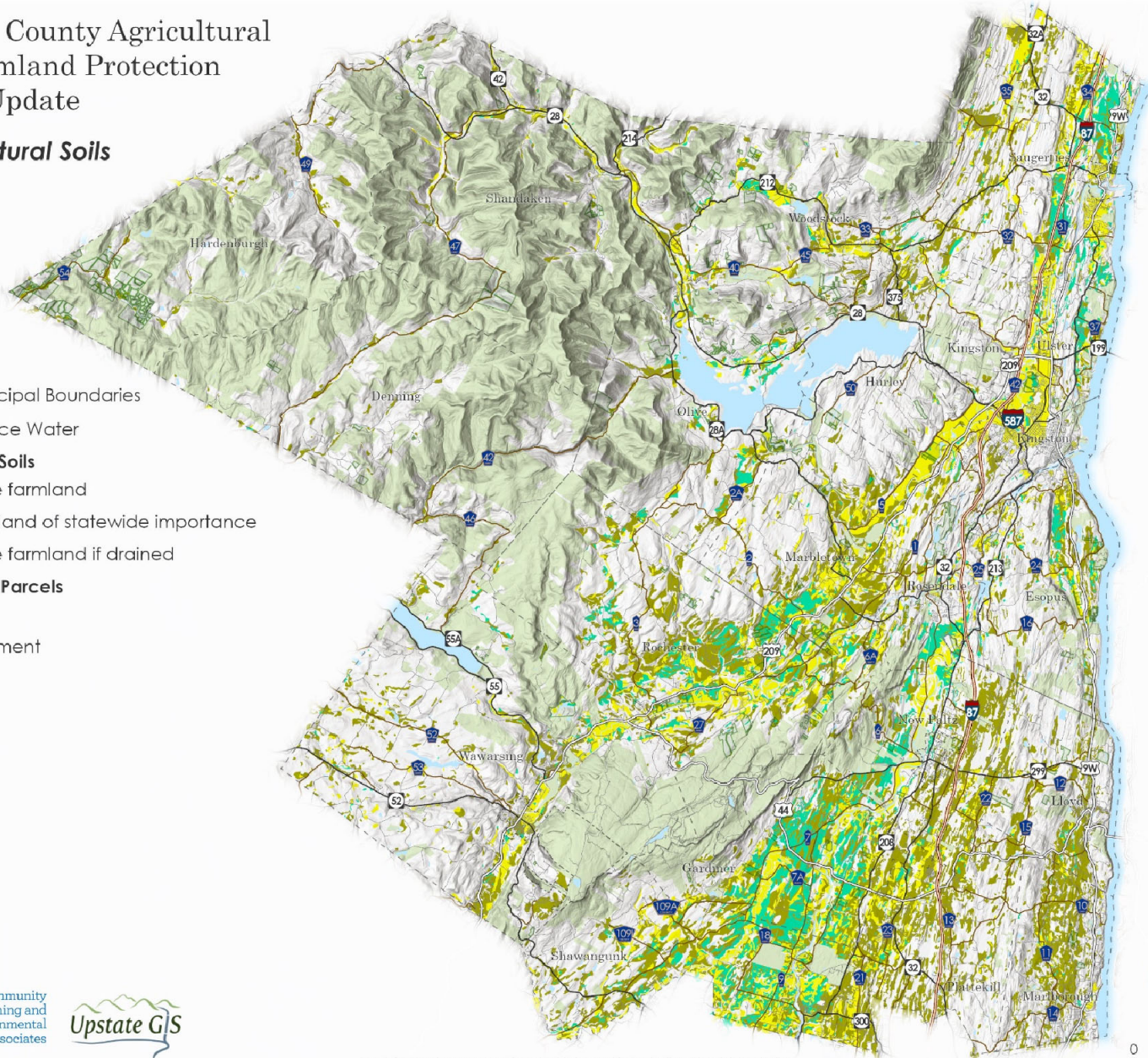


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Ulster County Agricultural & Farmland Protection Plan Update

Agricultural Soils

-  Municipal Boundaries
-  Surface Water
- Farmland Soils**
-  Prime farmland
-  Farmland of statewide importance
-  Prime farmland if drained
- Protected Parcels**
-  Fee
-  Easement



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Draft Ulster County Agricultural and Farmland Protection Plan














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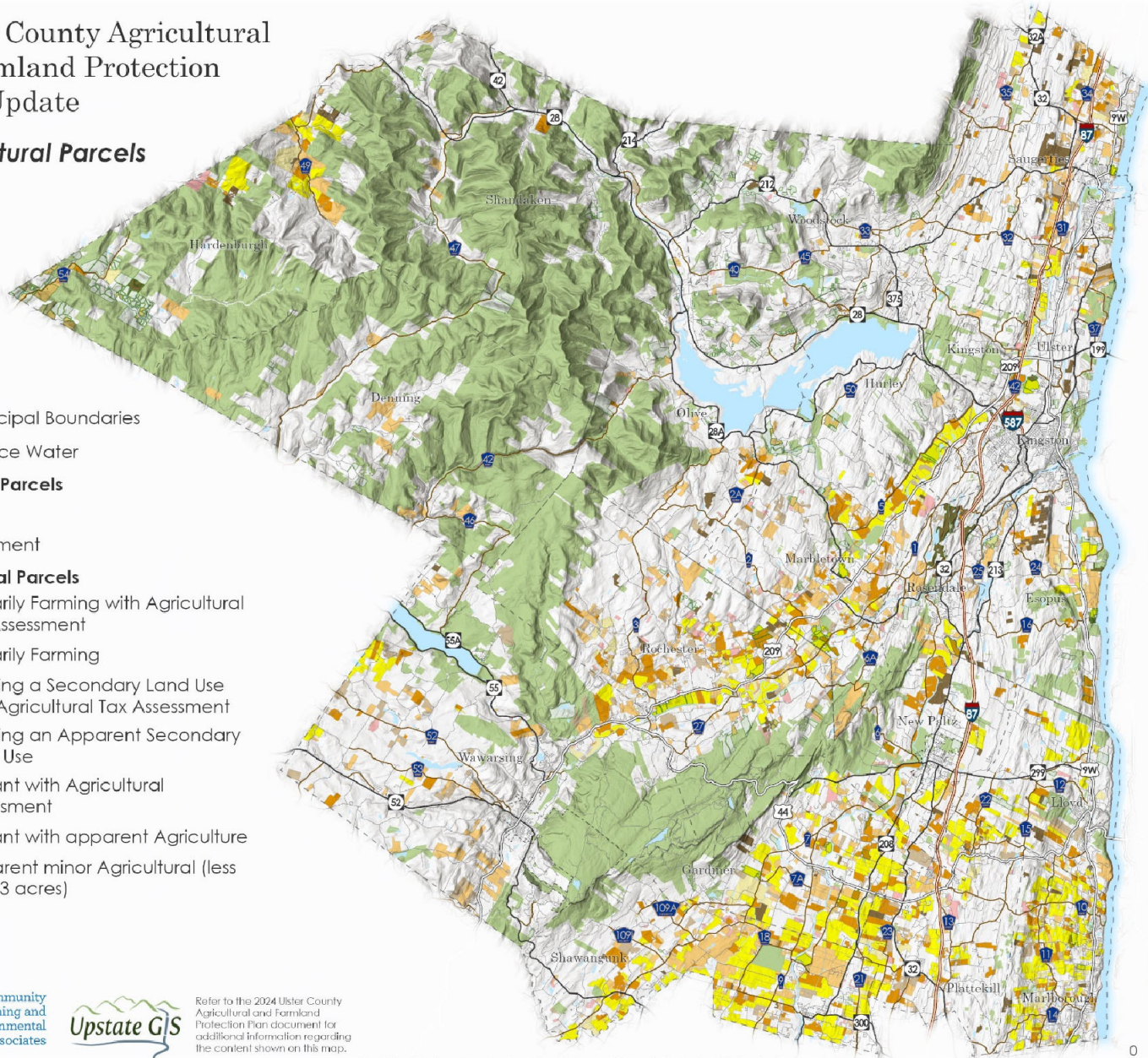


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Ulster County Agricultural & Farmland Protection Plan Update

Agricultural Parcels

-  Municipal Boundaries
-  Surface Water
- Protected Parcels**
 -  Fee
 -  Easement
- Agricultural Parcels**
 -  Primarily Farming with Agricultural Tax Assessment
 -  Primarily Farming
 -  Farming a Secondary Land Use with Agricultural Tax Assessment
 -  Farming an Apparent Secondary Land Use
 -  Vacant with Agricultural Assessment
 -  Vacant with apparent Agriculture
 -  Apparent minor Agricultural (less than 3 acres)



Draft Ulster County Agricultural and Farmland Protection Plan

October 2024

September 2024



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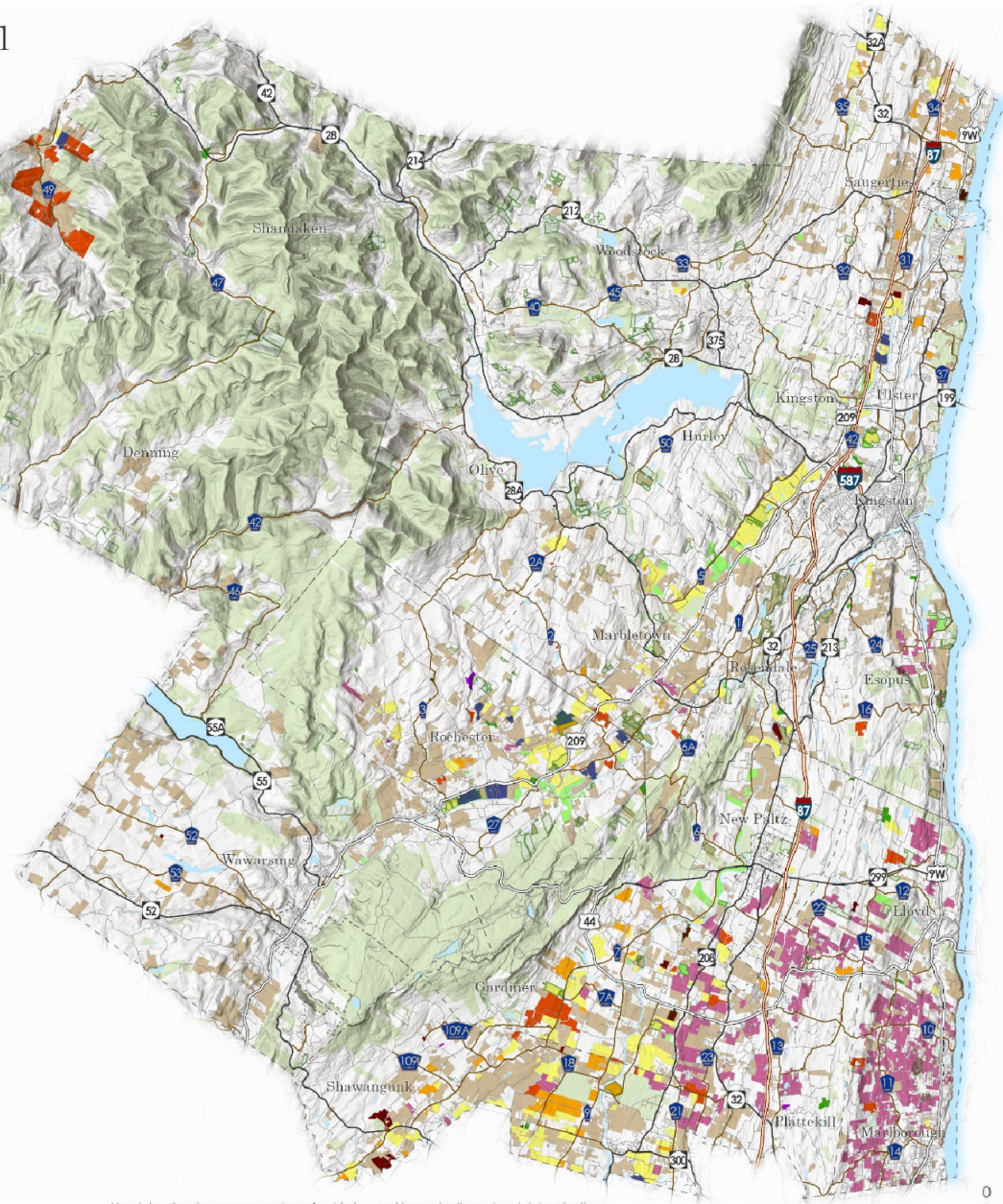
Refer to the 2024 Ulster County Agricultural and Farmland Protection Plan document for additional information regarding the content shown on this map.

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Ulster County Agricultural & Farmland Protection Plan Update

Agricultural Types

-  Municipal Boundaries
-  Surface Water
- Primary Farm Usage**
-  Orchards and Vineyard
-  Field Crops
-  Horses
-  Truck Crops
-  Cattle or Pigs
-  Nurseries and Greenhouses
-  Dairy
-  Other Livestock
-  Honey, Fruit and Specialty Crops
-  Christmasmas Trees
-  Sugarbush
-  Other or Unknown
- Protected Parcels**
-  Fee
-  Easement



DRAFT
5/15/2024

October 2024
Draft Ulster County Agricultural and Farmland Protection Plan



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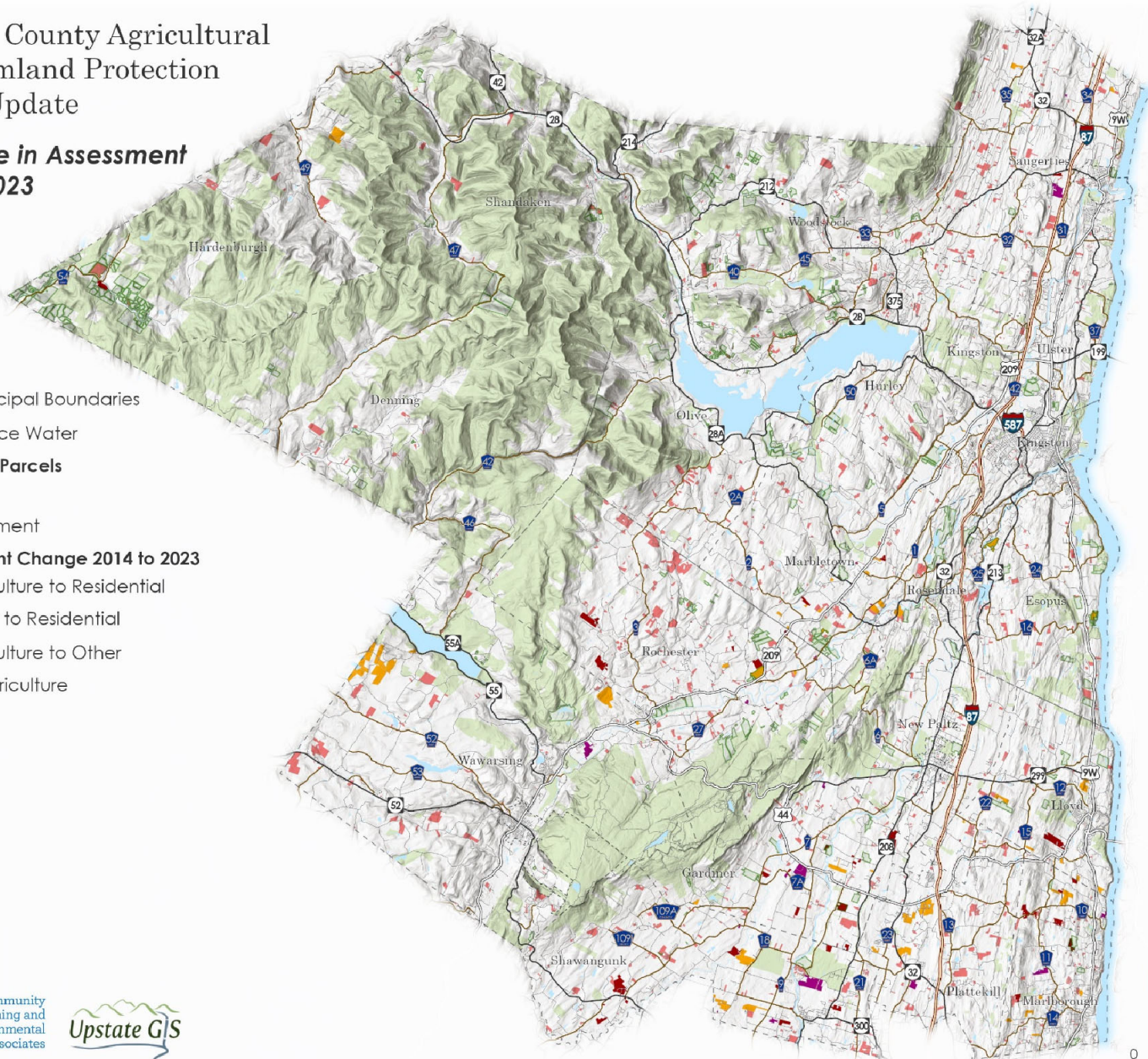
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Ulster County Agricultural & Farmland Protection Plan Update

Change in Assessment 2014-2023

DRAFT
5/15/2024

-  Municipal Boundaries
-  Surface Water
- Protected Parcels**
 -  Fee
 -  Easement
- Assessment Change 2014 to 2023**
 -  Agriculture to Residential
 -  Other to Residential
 -  Agriculture to Other
 -  To Agriculture



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October 2024



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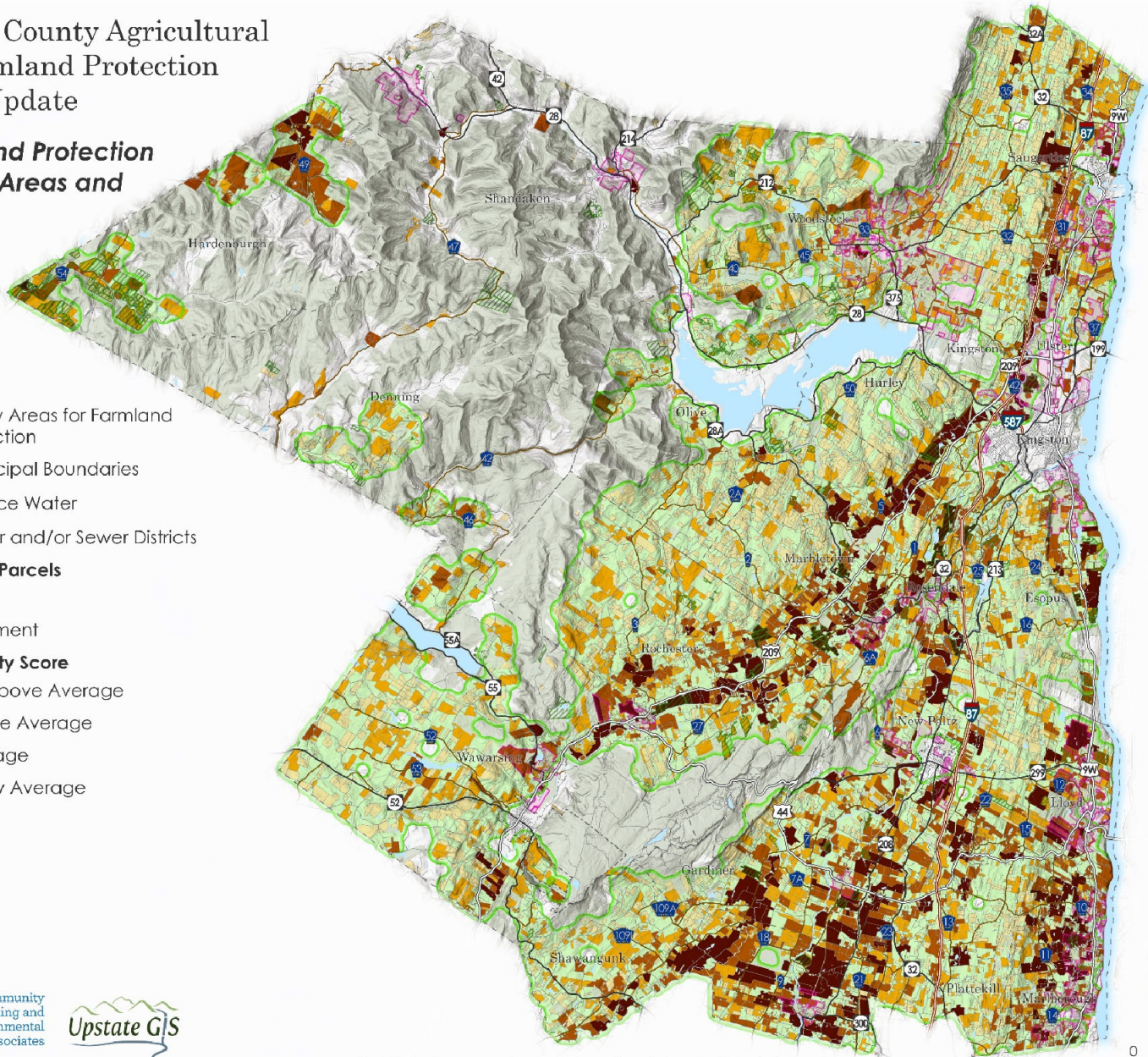
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Ulster County Agricultural & Farmland Protection Plan Update

Farmland Protection Priority Areas and Parcels

DRAFT
6/10/2024

-  Priority Areas for Farmland Protection
-  Municipal Boundaries
-  Surface Water
-  Water and/or Sewer Districts
- Protected Parcels**
-  Fee
-  Easement
- Farm Priority Score**
-  Far Above Average
-  Above Average
-  Average
-  Below Average



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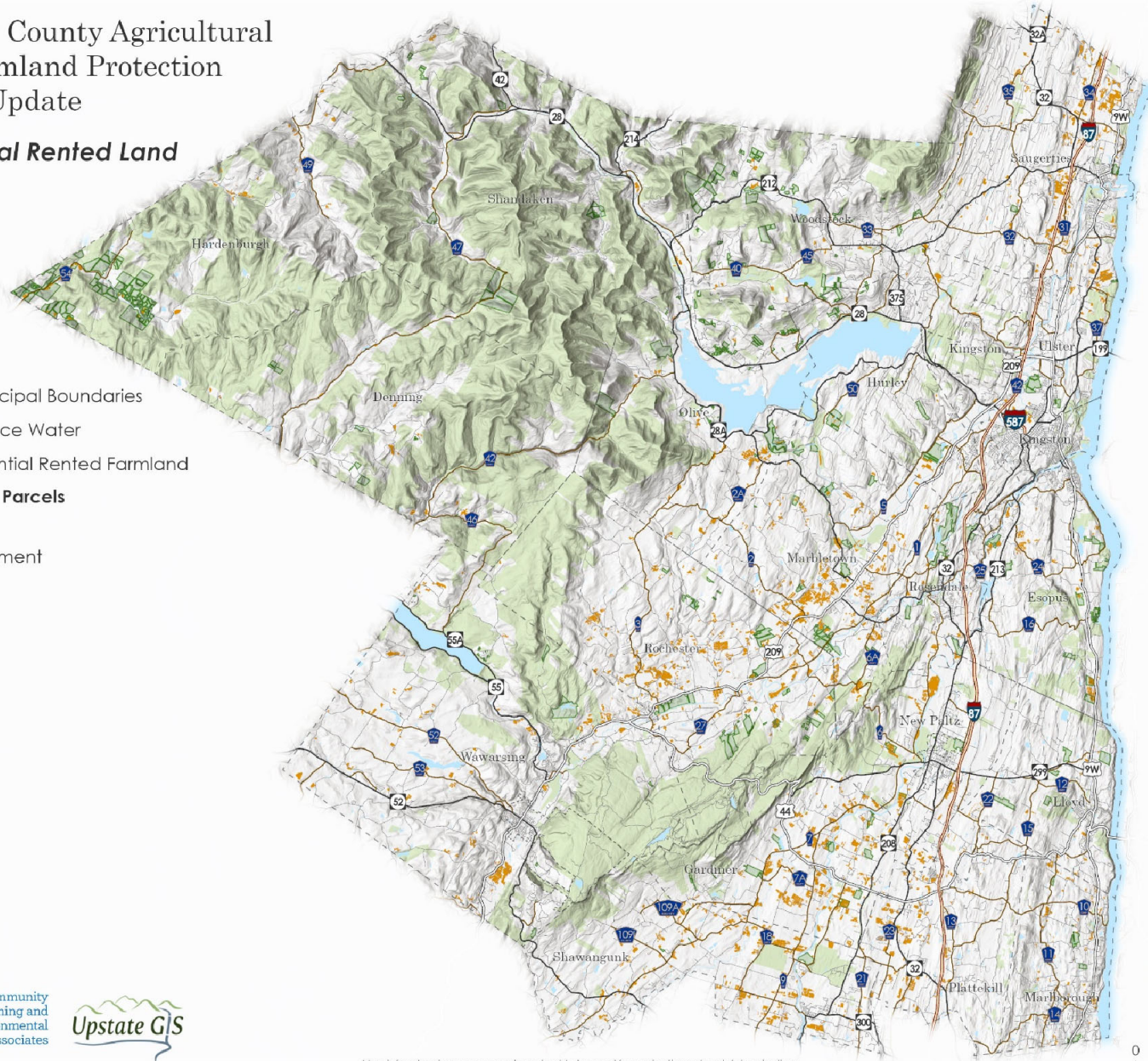
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Ulster County Agricultural & Farmland Protection Plan Update

Potential Rented Land

DRAFT
5/15/2024

-  Municipal Boundaries
-  Surface Water
-  Potential Rented Farmland
- Protected Parcels**
-  Fee
-  Easement



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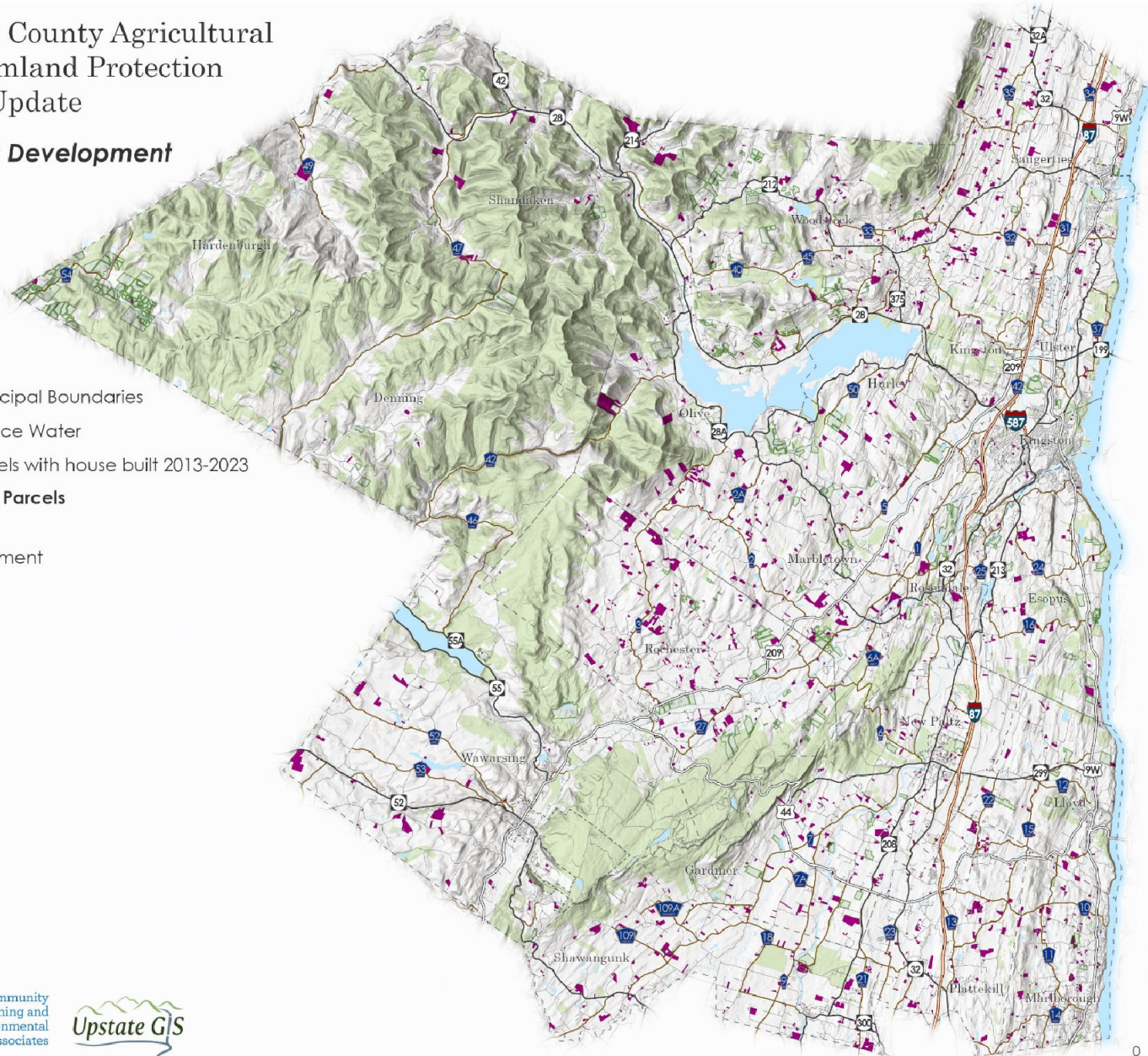
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Ulster County Agricultural & Farmland Protection Plan Update

Recent Development

DRAFT
5/15/2024

-  Municipal Boundaries
-  Surface Water
-  Parcels with house built 2013-2023
- Protected Parcels**
-  Fee
-  Easement



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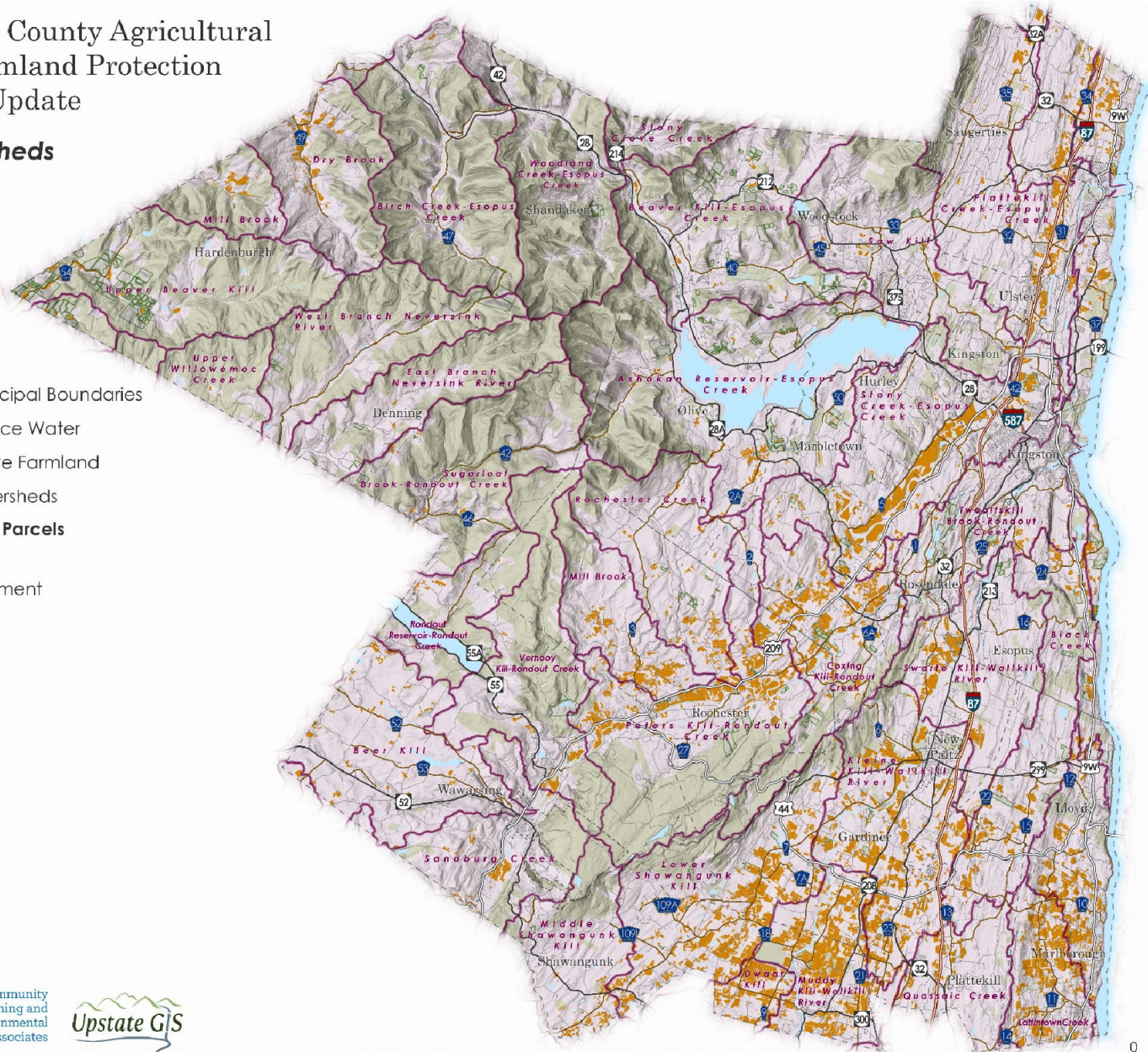
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Watersheds

-  Municipal Boundaries
-  Surface Water
-  Active Farmland
-  Watersheds
- Protected Parcels**
-  Fee
-  Easement



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3/14/2024

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Appendix 2. Economic Viability Analysis

Unless otherwise noted, the data used in this analysis are from the U.S. Department of Agriculture’s Census of Agriculture, a complete count of U.S. farms and the people that operate them. It is the most comprehensive source of information on agriculture at the state and county as well as national levels.

Conducted once every five years, the Census of Agriculture asks questions about land use and ownership, producer characteristics, production practices, income, and expenditures. The data is collected from the agricultural producers who are closest to the information. The USDA uses an accepted statistical methodology to correct for nonresponse, misclassification, and other issues, and it has extensive quality control measures in place to provide the most accurate data available.

Farms by Principal Product

The USDA uses the North American Industrial Classification System (NAICS) to classify agricultural production establishments (e.g., farms, orchards, greenhouses) in the Census of Agriculture by type of activity. The NAICS code identifies the *principal product*: the crop or animal that accounts for at least 50% of the establishment’s agricultural production. Not all farms, however, produce a single group of crops or livestock.

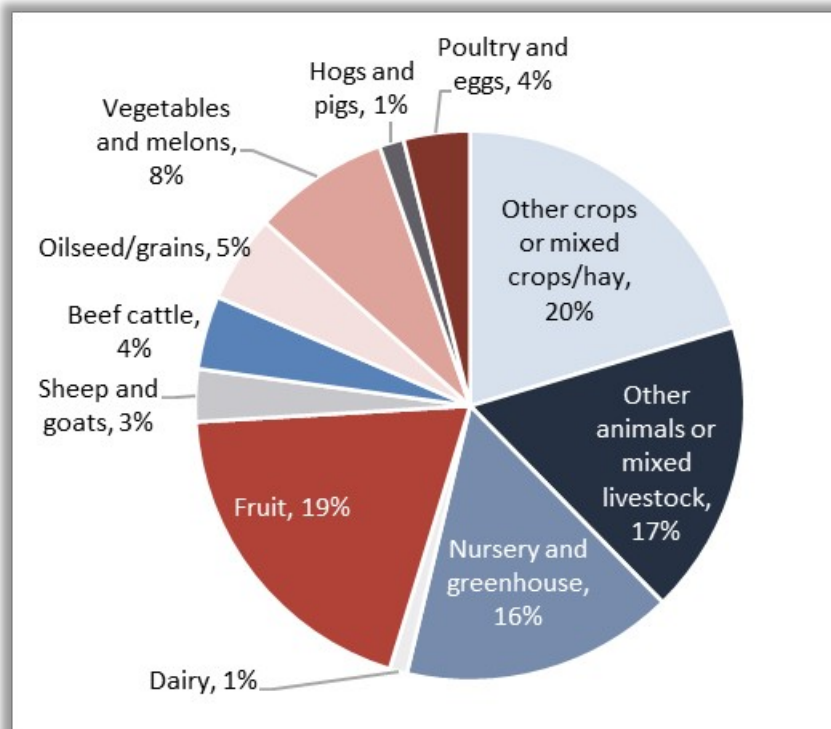


Figure A2-1. Farms by Principal Product, Ulster County, 2022
Source: U.S. Census of Agriculture

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Ulster County has a diverse array of agricultural operations and activities. As shown in Figure A2-1, the three most common types of farms in 2022 were those that cultivate a combination of crops, or other crops and hay (99, or 20%); grow fruit (94, or 19%); or raise a combination of animals, or other animals, including horses (84, or 17%). Establishments that grow plants, nursery stock, and flowers as well as crops of any kind under cover made up the fourth largest classification (78, or 16%).

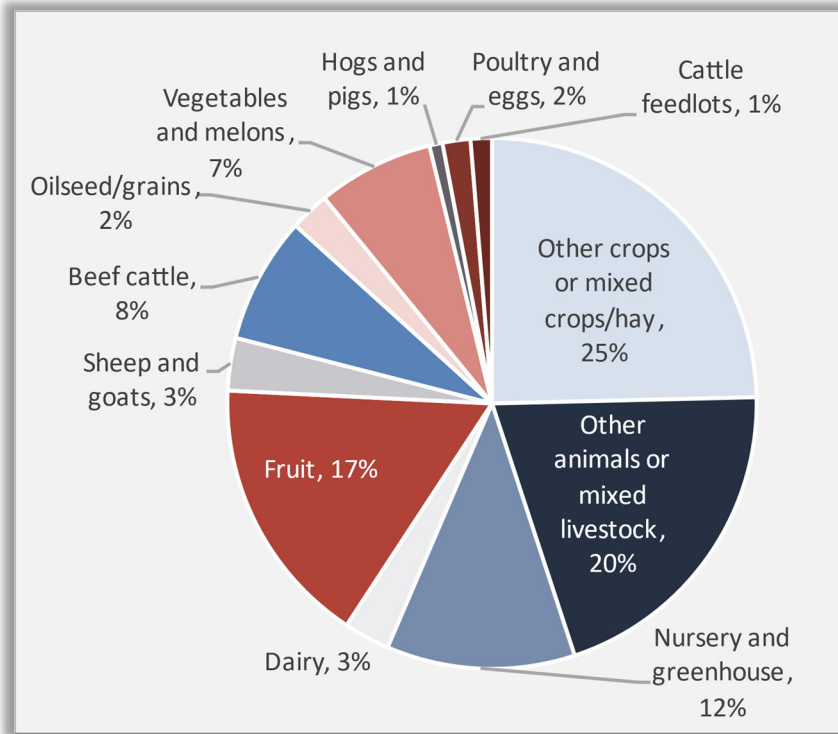


Figure A2-2. Farms by Principal Product, Ulster County, 2002

Source: U.S. Census of Agriculture

Since 2002, the composition of farms by principal product in Ulster County has shifted away from raising beef and dairy cattle. The number of dairy farms fell 67% between 2002 and 2022, while the number of beef cattle farms was reduced by half. More farm operations, on the other hand, are producing grains, raising chickens for their eggs, and growing nursery, greenhouse, and floriculture products as their primary activity. There were twice as many oilseed and grain farmers and 28% more nurseries, greenhouses, and flower growers in the County in 2022 as there were in 2002.

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Farms by Value of Production

In 2022, 48% of the farms in Ulster County sold less than \$10,000 in agricultural products, down from 61% of farms in 2002. In contrast, farms with annual sales of \$100,000 or more nearly doubled, from 57 (or 11%) in 2002 to 103 (or 21%). Consequently, the average market value of sales per farm increased over the twenty-year period from \$64,692 to \$217,120; when these figures are adjusted for inflation, the average increased 104%.

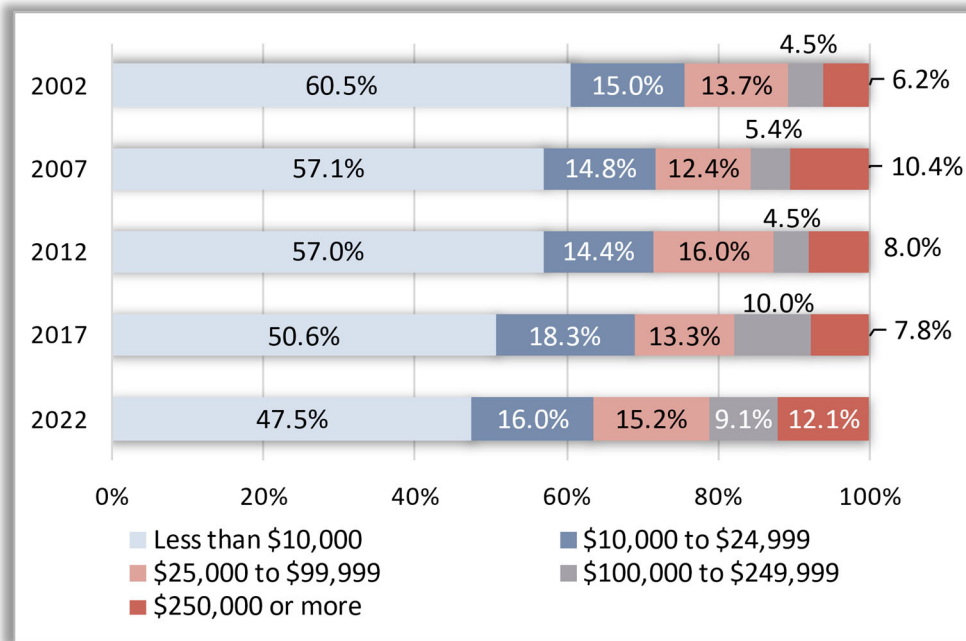


Figure A2-3. Farms by Value of Agricultural Production, Ulster County
 Source: U.S. Census of Agriculture

Most of the market value of agricultural products sold, however, is generated by a comparatively small number of farms. In 2022, 103 farms in Ulster County, or 21% of the total, accounted for 95% of the sales.

To qualify for an agricultural assessment in New York State, farm operations must have annual gross sales of agricultural products averaging \$10,000 for the preceding two years. Based on sales figures, less than half of the farms in Ulster County are eligible to receive a partial tax exemption.

Farm Product Sales

Sales of products from farm operations in Ulster County generated \$105.5 million in 2022. Fruit represented the highest valued product, with \$74.6 million in sales. The market value of fruit included \$2.1 million in berries. Sales of vegetables, melons, potatoes, and sweet potatoes generated \$11.6 million in sales, while sales of nursery and greenhouse products totaled \$4.7 million. Nursery and greenhouse products include bedding/garden plants, cut flowers, potted flowering plants, ornamental shrubs, fruit trees, evergreen trees, and even greenhouse vegetables and herbs, with half of the sales attributed to nursery stock crops (mostly trees and shrubs) and roughly 40% to plants and flowers. Taken together, fruits, vegetables, nursery and greenhouse products, grains and soybeans, hay, and equine accounted for 95% of the market value of farm products sold.

Ulster County ranks #30 of all New York counties in the total value of agricultural products sold, up from #36 in 2017. It is #2 in the state, after Wayne County, in the sales of fruits and berries; #5 in the value of horses, ponies, and mules sold; and #9 in the sales of sheep, goats, and their products.

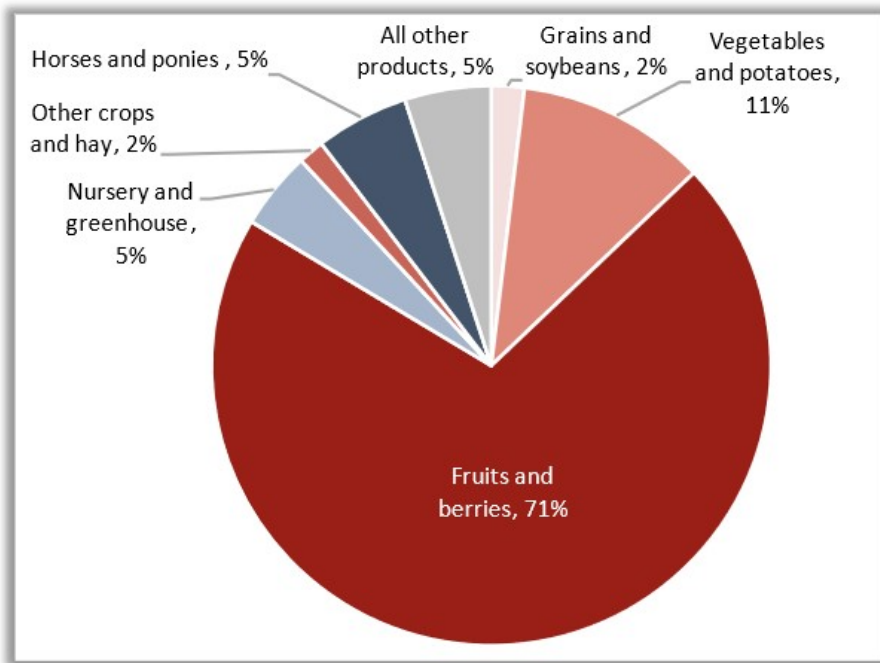


Figure A2-4. Distribution of Sales by Commodity Group, Ulster County, 2022
Source: U.S. Census of Agriculture

In inflation-adjusted dollars, total sales in Ulster County increased 87% between 2002 and 2022. Sales of crops grew much faster (102%) than the sales of livestock, poultry, and their products (11%). Two commodity groups experienced a net decline in sales: cattle and calves (-53%) and other crops and hay (-34%). Consistent with the loss of dairy farms, milk sales fell 79%, while sales of poultry and eggs fell 33% between 2007 and 2022 (data on these commodities was not available in 2002). Lower-volume products such as cultivated Christmas trees and sheep and goats have experienced some of the largest increases in market value.

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A statement by the NY Farm Bureau on the release of the 2022 Agricultural Census observed that the significant increase in the market value of agricultural products statewide was “in large part due to temporary increases in major commodity prices during the pandemic, which have since fallen in the past year.” The statement also cited the USDA’s prediction that farm income will drop 25% in 2024.¹⁴

Table A2-1. Market Value of Sales by Commodity Group in Ulster County <i>in Constant 2022 Dollars</i>						
	Dollar Amounts in 000s					%
	2002	2007	2012	2017	2022	Change, 2002-22
Crop Sales, Incl. Nursery & Greenhouse Products	\$47,224	\$83,785	\$59,891	\$57,996	\$95,184	101.6%
Fruits & Berries	\$27,979	\$60,921	\$41,009	\$40,743	\$74,611	166.7%
Vegetables & Potatoes	\$11,450	\$13,314	\$9,751	\$10,522	\$11,575	1.1%
Nursery & Greenhouse Products	\$4,709	\$6,969	\$5,259	\$2,826	\$4,745	0.8%
Grains, Oilseeds, Soybeans	\$549	\$938	\$1,745	\$1,209	\$2,009	266.2%
Cultivated Christmas Trees	\$92	\$211	\$133	\$542	\$621	575.1%
Other Crops & Hay	\$2,447	\$1,432	\$1,994	\$2,153	\$1,623	-33.7%
Sales of Livestock, Poultry, & Their Products	\$9,305	\$9,589	\$12,269	\$7,665	\$10,336	11.1%
Horses, Ponies, & Mules	\$1,840	\$702	\$4,912	\$2,142	\$5,699	209.8%
Beef Cattle & Calves	\$1,753	\$1,691	\$1,283	\$639	\$822	-53.1%
Milk from Cows	NA	\$3,761	\$1,794	\$1,496	\$808	NA
Sheep, Goats, & Products	\$159	\$112	\$111	\$265	\$414	159.8%
Poultry & Eggs	NA	\$310	NA	\$161	\$207	NA
Hogs & Pigs	\$62	\$84	\$107	\$66	NA	NA
All Other Animals/Products	NA	\$2,928	NA	NA	NA	NA
TOTAL	\$56,529	\$93,374	\$72,159	\$65,660	\$105,520	86.7%

Source: U.S. Census of Agriculture

Direct and Intermediated Sales

Ulster County offers many opportunities for direct-to-consumer sales of agricultural products. These include farmers’ markets in Kingston, New Paltz, Phoenicia, Pine Bush, Rosendale, Saugerties, New Paltz, Pine Bush, and Woodstock; approximately 50 farmstands and on-farm markets; an estimated 42 CSAs; and at least a dozen farms and orchards that have “pick-your-own” operations. About 15-20 farms from Ulster County are vendors at NYC Greenmarkets. Some farmers report that they are unable to sell at local farmers’ markets or NYC Greenmarkets due to low turnover among vendors; there are limited openings and a lot of competition.

¹⁴ Morning Ag Clips, “NY Farm Bureau Statement on New Agriculture Census Results,” February 15, 2024, <https://www.morningagclips.com/ny-farm-bureau-statement-on-new-agriculture-census-results/>.

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In 2022, 23% of farms in Ulster County sold agricultural products directly to consumers. Cash receipts totaled \$10.7 million, down 18% from 2017 when figures are adjusted for inflation but much higher than the \$3.5 million in direct-to-consumer sales reported in 2012. The 2017-22 decline could be related to the temporary restrictions on business operations during the COVID-19 pandemic. According to the USDA’s Economic Research Service, farmers who market goods directly to consumers incur less debt and are more likely to remain in business than those who market only through traditional channels.¹⁵

In addition to direct-to-consumer sales, the Census of Agriculture collects data on the sale of local food products directly to retail outlets, restaurants, institutions (e.g., schools, hospitals), and so-called intermediate markets, like wholesalers and food hubs. In 2022, farms in Ulster County sold \$31.5 million in agricultural products through these channels, up from \$7.9 million (or \$9.5 million in constant 2022 dollars) in 2017. Moreover, the number of farm operations selling directly to retailers, institutions, and intermediaries increased from 12% to 16%. Sales in these markets averaged over \$409,000 per farm, providing a substantial revenue stream for these producers.

Table A2-2. Selected Farm Practices and Markets, Ulster County

	Number of Farms		Sales (000s) In Constant 2022 Dollars	
	2017	2022	2017	2022
Sell directly to consumers	111	112	\$13,016	\$10,656
Sell directly to retailers, institutions, and intermediaries	51	77	\$9,492	\$31,503
Produce/sell value-added products	48	57	\$5,507	\$9,112
Produce/sell organic products	18	18	\$2,911	\$2,218

Source: U.S. Census of Agriculture. Note: Data on most of these variables was not collected before 2017.

Value-Added Production and Sales

Many farms in Ulster County engage in value-added production to diversify their income. Approximately 12% of farm operations produced and sold value-added products in 2022, grossing \$9.1 million; sales averaged \$160,000 per year. In inflation-adjusted dollars, sales of value-added products increased 65% over the value in 2017.

Farm wineries, breweries, cideries, and distilleries are among Ulster County’s value-added enterprises. As of July 2023, the NYS Liquor Authority listed 70 licensed wineries, breweries, cideries, and distilleries in the County, two-thirds of them (48) farm-based¹⁶. These businesses attract visitors, provide gathering spaces, and serve as venues for private events. Other value-added products made by local farms include baked goods, jams and jellies, apple cider, sheep

¹⁵ USDA Economic Research Service, “Farms That Sell Directly to Consumers May Stay in Business Longer,” April 28, 2016, at <https://www.usda.gov/media/blog/2016/04/28/farms-sell-directly-consumers-may-stay-business-longer>. Consumers will often pay more for products than farmers can get by selling wholesale.

¹⁶ The number of farm-based craft beverage producers in neighboring counties ranges from 10 in Greene County to 46 in Orange County.

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wool, dried herbs and spices, cheese, ice cream, and mushroom extracts.

Organic Production and Sales

According to the 2022 Agricultural Census, Ulster County had 23 farms with organic production certified by the USDA, two more than the number in 2017. Of these, 18 reported organic product sales totaling \$2,218,000, down slightly from five years earlier.

About 4% of farms in the County used organic practices, virtually the same proportion as in New York State, but the State lost 20% of its organic farms between 2017 and 2022. Average organic product sales were \$123,222 per farm in Ulster County, well under the state average of about \$211,000.

Despite continued demand for organic products, the inflationary pressures of the past few years and their impact on food costs may have discouraged some consumers from buying foods that usually command a price premium compared to conventional products.

Farm-Related Income

With nearly two-thirds of the agricultural establishments in Ulster County earning less than \$25,000 per year from the sales of crops and livestock, many farmers have turned to sales and services related to the farm operation as an additional source of income.

These include providing services to other producers (e.g., plowing, planting, spraying), renting out farmland or buildings, boarding or

breeding livestock, and selling standing timber and firewood. In 2022, about 32% of farms in Ulster County received farm-related income, averaging \$78,321. This is more than twice the state average (\$33,147).

Table A2-3. Farms That Earn Income from Agritourism and Recreational Services, Ulster County

Year	Farms		Income*	Average Per Farm*
	Number	Percent		
2002	7	1.3%	\$22,995	\$3,285
2007	17	3.4%	\$249,111	\$14,654
2012	26	5.3%	\$1,431,581	\$55,061
2017	32	7.6%	\$5,728,042	\$179,001
2022	31	6.4%	\$3,625,000	\$116,935

Source: U.S. Census of Agriculture.

* All dollar figures are in constant 2022 dollars (i.e., adjusted for inflation).

Another activity associated with the agricultural sector, increasingly popular among visitors to the Hudson Valley, is agritourism. The 2022 Census of Agriculture reports that 31 farms in Ulster County earned income through agritourism and recreational services, defined by the USDA as “services such as hunting, fishing, farm or wine tours, hayrides, etc.” This is a relatively limited definition, however. It does not include picking your own apples, shopping for farm-fresh produce at farmstands and farmers’ markets or visiting tasting rooms to sample craft beverages produced on the farm, all of which are generally considered agritourism activities.

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Although it declined slightly from the previous Agricultural Census, the share of farms with agritourism sales in Ulster County, 6%, was twice the share of farms statewide in 2022. Moreover, farms offering agritourism and recreational services in the County, on average, generated about \$117,000, twice as much as the state average of \$58,626. Since 2012, Ulster County has consistently had a higher proportion of farms involved in agritourism than New York State. It has also had higher average revenues from agritourism. With its many farms and orchards, farm-based craft beverage operations, and on-farm activities, agritourism is a strength for Ulster County.

In 2022, visitor spending in Ulster County grew to \$979 million, reaching 143% of 2019 (pre-pandemic) levels. The tourism industry supported 8,085 jobs and generated \$390 million in labor income. Direct employment in tourism accounted for about 10% of all jobs in the County. (Source: *Tourism Economics, Economic Impact of Visitors in New York 2022: Catskills Focus*, September 2023.)

Production Expenses

Farm production expenses nationwide reached record highs from 2020 to 2023 as the U.S. experienced its highest rates of inflation in 40 years. Agricultural inputs such as feed, fertilizers and soil conditioners, and fuel as well as labor experienced the largest cost increases, affecting virtually every type of farm.

Table A2-4. Farm Production Expenses in Ulster County, 2022

	Total in 000s	# Farms	% Change, 2002-2022*
Hired Labor	\$37,765	174	150.1%
Repairs, Supplies, and Maintenance	\$9,754	452	31.6%
Contract Labor	\$9,122	53	438.7%
Agricultural Chemicals	\$8,047	201	149.1%
Property Taxes	\$5,618	462	-4.5%
Gasoline, Fuels, and Oils	\$4,662	473	97.1%
Utilities	\$4,515	378	145.2%
Feed for Livestock	\$4,178	213	165.5%
Seeds, Plants, Vines, Trees	\$2,898	247	22.4%
Interest Expense	\$2,741	133	-9.7%
Cash Rent for Land/Buildings/Grazing Fees	\$1,165	148	47.2%
Medical Supplies / Veterinary Services	\$1,119	148	NA
Livestock and Poultry	\$737	74	-66.3%
All Other Expenses	\$17,286	-	57.1%
TOTAL	\$112,961	-	89.8%
Average Per Farm	\$232,430	-	107.8%

Source: U.S. Census of Agriculture. * Change based on inflation-adjusted dollars

Ulster County farms spent approximately \$113 million on production costs in 2022, with an average of \$232,430 per farm (it was about \$195,000 per farm statewide). The largest expense was for hired labor, at \$37.8 million, which accounted for one-third of total production costs. Other major expenses included repairs, supplies, and maintenance costs associated with farm equipment and

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machinery (\$9.8 million), contract labor (\$9.1 million), and agricultural chemicals (\$8.0 million).

About 36% of the farms in Ulster County had hired labor, including paid family members, who contributed to agricultural operations. These 174 farms directly employed 1,800 people, paying \$37.8 million in annual wages. About half of the employees worked 150 days or more. The Census of Agriculture reports that 48 farms with hired labor employed migrant workers but does not show how many migrant workers were specifically on these farms. Ulster County had a combined total of 856 migrant workers serving as hired or contract labor.



Figure A2-5. Farm Employment and Payroll in Constant 2022 Dollars, Ulster County, 2022

Source: U.S. Census of Agriculture

In interviews and focus groups, many farm operators cited labor costs and regulations as a major challenge. Access to an adequate and reliable supply of labor has long been an issue in the agricultural sector because the work is physically demanding and often seasonal. The situation in New York has been compounded by regulatory changes that have increased the cost of labor. Under the Farm Laborers Fair Labor Practices Act of 2019, for example, farm laborers became entitled to overtime pay, at 1.5 times their regular pay rate, for work performed in excess of 60 hours per week. The 60-hour threshold was later lowered to 40 hours per week, to be phased in over a ten-year period. The State also adopted new minimum wage rates that will reach \$16 per hour outside New York City, Long Island, and Westchester County in 2026. The 2024 rate is \$15 per hour, twice the federal minimum wage paid to farmworkers in other states.

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Production costs vary; not all expense categories apply to every farm operation. More than 90% of the farms in Ulster County incurred costs for gasoline, oils, and fuels; property taxes; and repair and maintenance of farm equipment. Relatively few farms paid for livestock and poultry, cash rent for land and buildings, or contract labor. Moreover, farm expenditures for livestock and poultry declined 66% between 2002 and 2022 as the County lost many farms where animals are raised.

In inflation-adjusted dollars, total production costs in Ulster County increased 90% from 2002 to 2022, or 65% from 2017 to 2022 alone, with nearly every expense rising. The trend was the same in New York State as a whole. The USDA has projected that U.S. farm expenses will level off (but not decline) in the next 2 to 3 years.

Labor costs, on average, make up 49% of all production expenses on New York State apple farms, according to Cornell Cooperative Extension's Lake Ontario Fruit Program. Apple growers employ both year-round and seasonal workers who may be a mix of family members, residents, and farmworkers sourced from countries outside the U.S. (Source: Todd M. Schmit, Roberta M. Severson, Jesse Strzok, and Jose Barros, "Economic Contributions of the Apple Industry Supply Chain in New York State," Charles H. Dyson School of Applied Economics and Management, Cornell University, March 2018.)

Farm Profitability

Used as a broad measure of profitability, net cash farm income encompasses cash receipts from farming plus farm-related income, including government payments, minus production expenses. Net cash farm income (NCFI) in the U.S. reached a 20-year high in 2022, but the USDA projects that farm sector profits will fall in 2024 due to downward pressure on commodity prices and higher production expenses.¹⁷

According to the Agricultural Census, net cash farm income (NCFI) in Ulster County totaled \$8.6 million in 2022. This figure has fluctuated over the last twenty years, reaching a high of \$14.3 million (or \$20.3 million in constant 2002 dollars) in 2007.

The average net income realized by farm operations in Ulster County was \$17,786, about one-quarter of the state average of \$76,781. Only 35% of farms in Ulster County earned a profit in 2022, below the state average of 40%. The average net gain was \$227,818, while the average net loss was \$97,263.

Fixed Assets

Real estate is typically the largest single component of a farm's total assets. In addition to being a source of wealth, farm real estate serves as the principal source of collateral for farm loans. Changes in the value of farmland often impact the financial well-being of agricultural producers. An

¹⁷ U.S. Department of Agriculture, Economic Research Service, "Farm Sector Income and Finances: Highlights from the Farm Income Forecast," February 7, 2024, <https://www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/highlights-from-the-farm-income-forecast>.

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upward trajectory in farmland values can be seen as a positive in terms of return on investment and the ability of farmers to get a good price if they decide to sell their land. On the other hand, producers who lease land may face higher costs, while farmers looking to expand may have difficulty finding additional property they can afford. Compounding the issue is the fact that appreciation in farm real estate values often reflects rising land prices overall, which may be the result of development pressure and competition with other land uses such as housing.

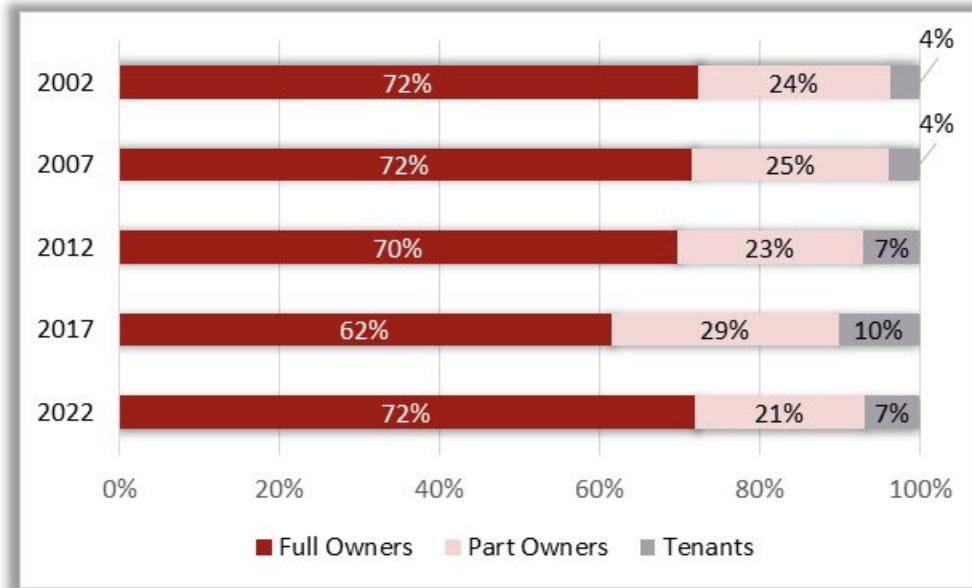


Figure A2-6. Farms by Tenure, Ulster County
Source: U.S. Census of Agriculture

The Census of Agriculture classifies farms by the tenure of producers. In 2022, 72% of the farms in Ulster County were operated by full owners; 21% by part owners, who operate on land they own as well as land they rent from other property owners; and 7% by tenants, who farm *only* on land rented from others. Approximately 61,000 acres, or 84% of the farmland in the County, is owned by the producer; the remainder is rented or leased for farming.

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The farm real estate value per farm in Ulster County averaged \$1,307,443 in 2022, well above the statewide average of \$870,211. One-third of the farms in the County (162) were valued at \$1,000,000 or more; 23% had values between \$500,000 to \$999,999. In the last twenty years, the average market value of farmland and buildings has regularly been higher in the County than in the State – even though the average acreage of Ulster County farms is below the state average.

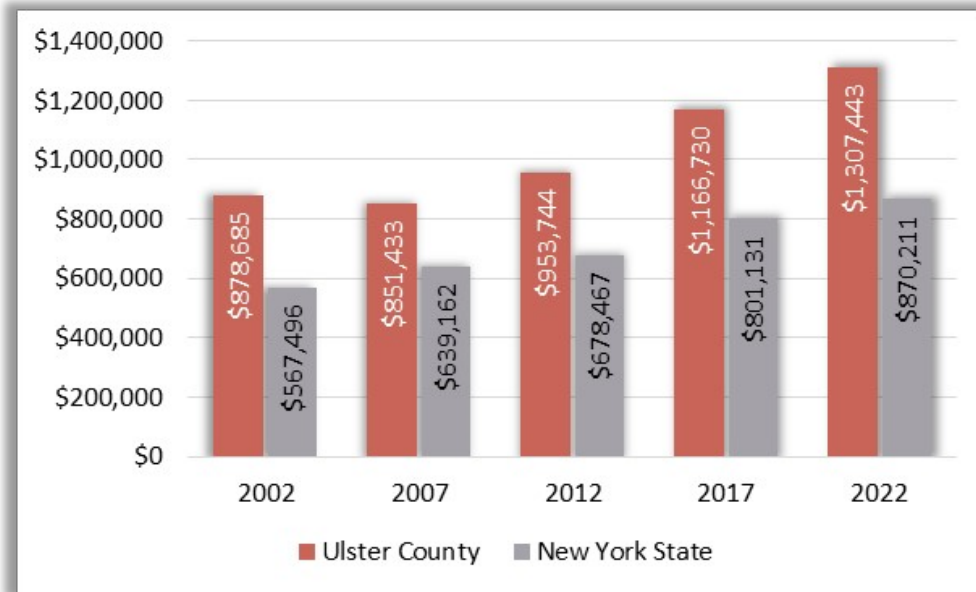


Figure A2-7. Average Market Value Per Farm in Constant 2022 Dollars
Source: U.S. Census of Agriculture

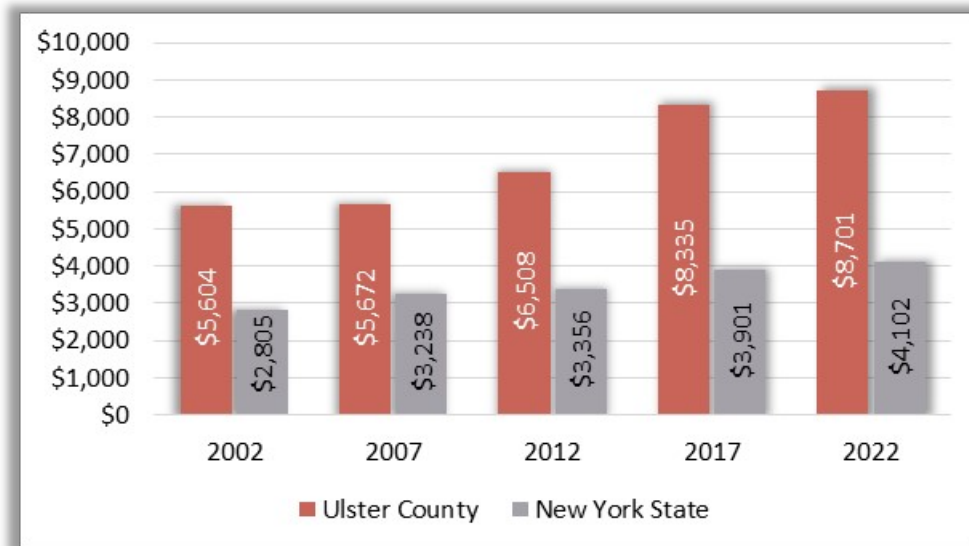


Figure A2-8. Average Market Value of Farms Per Acre in Constant 2022 Dollars
Source: U.S. Census of Agriculture

The differences are even more pronounced when looking at farm real estate values on *per-acre* rather than *per-farm* basis. Farm real estate in Ulster County averaged \$8,701 per acre in 2022, more than twice the state average of \$4,102. Moreover, when the dollar amounts are adjusted for

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inflation, the average value per acre rose faster in Ulster County – 55% – compared to 46% in the state.

Data on arm’s length real estate sales in Ulster County reveals that 137 parcels classified in property assessment records as Agricultural at the time of sale changed hands from 2014 through 2023. Comprising 5,015 acres, the parcels sold make up roughly 13% of the total acreage coded as Agricultural. The number of transactions, parcels, and acreage varied each year, but sales activity peaked in 2020 and 2021, much as it did in the residential real estate market. The median selling price per acre over the period was \$10,000.

In addition to real estate, farmers in Ulster County own and maintain a variety of agricultural implements, machinery, and equipment (e.g., trucks, tractors, combines, irrigation equipment). The total market value of these items in 2022 was estimated at \$73 million, or \$150,171 per farm. The average value of farm machinery and equipment statewide was \$175,000.

Farm Operator/Producer Characteristics

Ulster County’s 486 agricultural establishments in 2022 were operated by 1,090 producers. The USDA instructed farmers completing the most recent Census of Agriculture to identify up to 4 producers per farm; the elimination of “principal” producers as a category, however, means that only 2017 and 2022 data is directly comparable.

Key characteristics of farm operators and producers in Ulster County can be summarized as follows:

- 52% of the producers were full-time farmers in 2022, about the same proportion as in 2017
- Two-thirds have been on their present farm for a minimum of ten years
- 7% of producers have been on their current farm for less than two years, up from 5% in 2017
- Continuing the long-term trend of aging among producers, Ulster County farmers have an average age of 57.8 years, up from 56.5 in 2017; the state and national averages are 56.7 and 58.1 years, respectively
- Nearly 41% of producers in the County are aged 65 and over
- 8% of producers are under 35, defined by the Census as “young farmers”; they operate on a disproportionate share of the farmland acreage, however (28%). This may indicate that they are farming with more experienced and/or older producers
- There are more than 5 times as many producers aged 65 and over than producers under age 35
- Ulster County has experienced an increase in younger (though not the youngest) farmers: 17% were ages 35 to 44, up from 10% five years earlier
- 40% of producers in Ulster County are women, slightly higher than the state average of 38%
- The Census of Agriculture recorded 16 producers in Ulster County who are black or African American and 38 who are of Hispanic origin; they represent 2% and 4% of the farmers, respectively, higher than the statewide proportions (1% or less)

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- Beginning farmers are those with 10 or fewer years of farming experience. In Ulster County, they make up 29% of the producers, operate 37% of the farms, and grow crops or raise livestock on 24% of the farmland acreage
- 44% of producers have been involved in estate or succession planning, below the state average of 51%

An interview with a representative of the USDA Farm Service Agency, who works with farmers in Ulster County, suggests that there are many new and young producers in the County who did not grow up on a farm. She said that they tend to have smaller farms where they grow vegetables, small fruits, and/or cut flowers. If they have any livestock, it is more likely to be sheep or poultry (e.g., chicken raised for their eggs) than larger animals. She added that there are more women farmers in the younger generation who sell their products to small stores and restaurants or sell directly to consumers via the CSA model.

Agriculture-Related Industry

The agricultural sector in Ulster County extends beyond farms and orchards to encompass a wide range of associated industries. Businesses in these industries provide supplies and services to farms, convert raw agricultural materials into various products, and distribute and sell food and farm products. Agriculture-related industries include agricultural support services, food and beverage manufacturing, wholesalers of grocery products (such as fresh fruits and vegetables) and alcoholic beverages, nurseries and garden centers, food and beverage stores, florists, veterinary and landscaping services, and food services. While not all of these industries depend on local farm outputs, they are an important part of the supply chain.

Agriculture-related industries in Ulster County employ approximately 10,700 workers in 962 firms, about half of them in the food service industry. Food and beverage manufacturing provide employment for more than 800 people in the County, and thousands more within the Hudson Valley region where food and beverage production is a key industry cluster. In total, industries connected in some way with agriculture account for about 24% of the private-sector employment and 17% of the private companies in the County. Ulster County also has over 800 nonemployers, mostly sole proprietorships, in agriculture-related industries. Together, these nonemployers generate approximately \$43 million in sales.

Table A2-5. Agriculture-Related Industry in Ulster County

Industry and NAICS Code	Firms	Employees	Nonemployers
Agricultural Production and Support Services			
Crop Production (111)	59	639	-
Animal Production/Aquaculture (112)	10	162	-
Forestry and Logging (113)	-	-	31
Agriculture and Forestry Support Activities (115)	12	47	62
Veterinary Services (54194)	24	276	17
Landscaping Services (56173)	136	522	340
Manufacturing			
Food Manufacturing (311)	33	450	48

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Table A2-5. Agriculture-Related Industry in Ulster County

Industry and NAICS Code	Firms	Employees	Nonemployers
> Animal Product Manufacturing (3111)	1	NA	-
> Sugar and Confectionery Product Manufacturing (3113)	3	52	3
> Fruit and Vegetable Preserving and Specialty Food Manufacturing (3114)	6	47	NA
> Dairy Manufacturing (3115)	5	57	-
> Animal Slaughtering and Processing (3116)	1	NA	-
> Bakeries and Tortilla Manufacturing (3118)	13	243	19
> Other Food Manufacturing (3119)	4	46	21
Beverage Manufacturing (312)	25	357	17
Wholesale			
Grocery/Related Product Merchant Wholesalers (4244)	34	553	22
Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers (4248)	8	112	10
Retail and Food Service			
Nursery, Garden Center, and Farm Supply Retailers (44424)	8	88	-
Food and Beverage Stores (445)	128	2,361	51
> Grocery Stores (4451)	59	1,877	16
> Specialty Food Stores (4452)	30	306	33
> Beer, Wine, and Liquor Stores (4453)	39	178	NA
Florists (4593)	13	44	20
Food Services and Eating/Drinking Places (722)	472	5,078	227
TOTAL, Agriculture-Related Industry	962	10,689	848

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (firms and employees, 2022) and U.S. Census Bureau, Nonemployer Statistics (2021, the latest available).

According to Cornell University economist Dr. Todd M. Schmit, agriculture has a strong multiplier effect, impacting a wide range of industry sectors. In his most recent study of agriculture’s contributions to the State economy, Dr. Schmit reports that “every \$1 in output in agriculture generates an additional \$0.49 in backward linked non-agricultural industries, every job in agriculture generates an additional 0.65 non-agricultural jobs, and every \$1 in gross domestic product generates an additional \$1.14 in non-agricultural contributions to gross domestic product.”¹⁸

Farm Profitability

A few years ago, American Farmland Trust (AFT) developed a pilot project to create an Agricultural Viability Index (AVI) for 8 Northeastern states, including New York. The AVI was designed to assess the viability of agriculture as an economic sector and to measure the ability of jurisdictions such as counties to “maintain economically sustainable farm enterprises, support wealth creation, and

¹⁸ Todd M. Schmit, “The Economic Contributions of Agriculture to the New York State Economy: 2019,” Charles H. Dyson School of Applied Economics and Management, Cornell University, August 2021.

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retain land in agricultural production for future generations.” The tool was based on a series of variables from the 2017 Census of Agriculture related to farm economics, land ownership, and producer characteristics, with weights assigned to the variables according to their relative importance.

The tables in the sections that follow present many of the same economic variables used by AFT in calculating the AVI, using data from the more recent 2022 Census of Agriculture, with some changes and additions made. The intent is to benchmark Ulster County against New York State and four neighboring counties in the Hudson Valley (Dutchess, Greene, Orange, and Sullivan) on such factors as profitability, markets, diversity of income streams, farm assets, and production expenses.

Profitability

As indicated in Table A2-6, the average net cash farm income realized by farm operations in Ulster County was lower in Ulster County than in all neighboring counties except Dutchess, where the net income figure was negative. The share of farms with a net loss in Ulster County was above the state average and identical to the share in Orange County, but it was not as high as in Dutchess and Sullivan. Both the average net loss (\$97,263) and the average net gain (\$227,818) were higher in Ulster than in neighboring counties.

	Ulster	Dutchess	Greene	Orange	Sullivan	New York State
Average Net Cash Farm Income Per Farm	\$17,786	-\$23,682	\$24,953	\$32,032	\$26,164	\$76,781
% Of Farms with Net Financial Losses	65%	71%	66%	65%	68%	60%
Average Net Loss Per Farm	\$97,263	\$64,960	\$27,726	\$39,501	\$40,948	\$31,688
% of Farms with Net Financial Gains	35%	29%	34%	35%	32%	40%
Average Net Gain Per Farm	\$227,818	\$78,014	\$127,987	\$166,365	\$167,782	\$236,202

Sales Revenue, Markets, and Diversity of Income Streams

Table A2-7 presents variables on farm revenues and the ability of farms to adapt to changing conditions by diversifying their income streams. On both a per-farm and per-acre basis, market revenues in Ulster County generally exceed those in the neighboring counties, although sales per farm are not as high as they are statewide.

Farms in Ulster County have a relatively high level of direct-to-consumer sales; only Sullivan County has a higher share of farms selling directly to consumers (25%), although each county shown in the table exceeds the state average of 17%. In terms of the average value of food products sold by farms directly to consumers, Ulster County is at the front of the pack at \$95,143

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per farm, in a virtual tie with Sullivan County. The level of direct sales could be the result of strong resident support for local agriculture, as well as the many venues for selling food and farm products in Ulster County. Tourism may also play a role.

Approximately 16% of Ulster County farms sell to retail stores, institutions, wholesalers, and other intermediate markets, twice the state average of 8%. The value of food products sold by these 77 farms averages \$409,130, significantly above the averages in the comparison counties and the state.

Table A2-7. Economic Viability: Sales Revenue, Markets, and Diversity of Income Streams

	Ulster	Dutchess	Greene	Orange	Sullivan	New York State
Average Gross Market Revenue Per Farm	\$217,120	\$102,274	\$124,576	\$155,987	\$72,704	\$262,228
Average Gross Market Revenue Per Acre	\$1,445	\$639	\$829	\$1,455	\$452	\$1,236
% Of Farms with Direct-to-Consumer Sales	23%	21%	22%	20%	25%	17%
Direct-to-Consumer Sales Per Farm	\$95,143	\$69,489	\$40,489	\$46,097	\$95,280	\$54,584
% Of Farms with Sales to Retailers, Institutions, and Local Food Hubs	16%	13%	7%	6%	7%	8%
Average Sales to Retailers, Institutions, and Local Food Hubs	\$409,130	\$52,737	\$32,285	\$133,622	\$11,778	\$233,968
% Of Farms That Sell Value-Added Products	12%	12%	9%	12%	12%	7%
Average Sales of Value-Added Products	\$159,860	\$66,712	\$35,105	\$35,855	\$29,326	\$172,335
% Of Farms That Earn Income Through Agritourism and Recreational Services	6%	7%	3%	8%	8%	3%
% Of Farms with Farm-Related Income	32%	47%	26%	36%	31%	41%
Ratio of Farm-Related Income to Gross Market Revenue	0.12	0.29	0.55	0.21	0.07	0.05

Approximately 12% of Ulster County farms produce and sell processed or value-added products, according to the Census of Agriculture, the same proportion as in the counties of Dutchess, Orange, and Sullivan. Average sales of value-added products in Ulster County are under the state level but are considerably higher than the comparison counties. Many of the highest average sales of value-added products within the state are in counties in western New York and the Finger Lakes with large numbers of wineries (e.g., Ulster, Yates).

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Most of the counties in the Hudson Valley, including Ulster, have higher percentages of farms that earn income through agritourism and recreational services than the state. At 6%, Ulster County lags behind Orange and Sullivan counties; however, average income through agritourism is higher in Ulster (\$116,935) than in any of the comparison areas, which range from \$25,040 per farm (Greene County) to \$95,620 (Orange County).

Other income related to the farming operation has helped some farm operators and producers stay afloat in the face of low commodity prices and rising production costs. Nearly a third of all farms in Ulster County and 41% of farms in the state earn some type(s) of farm-related income; the other counties range from 26% to 47%. The ratio of farm-related income to gross market revenue (i.e., sales) varies widely, with Ulster County on the lower end at 0.12.

Assets, Debt, and Expenses

In real estate assets, Ulster County farmers are relatively land-rich: the estimated average value of land and buildings per farm is 50% higher than the New York State average. Of neighboring counties, only Sullivan County – like other counties to the south like Rockland and Westchester – has higher average farm real estate values. The value of farm equipment and machinery per farm is also higher in Ulster County than the comparison areas, with the exception of the state.

Table A2-8. Economic Viability: Assets, Debt, and Expenses						
	Ulster	Dutchess	Greene	Orange	Sullivan	New York State
Average Value of Land and Buildings Per Farm	\$1,307,443	\$835,766	\$852,854	\$1,124,798	\$1,719,404	\$870,211
Average Value of Machinery and Equipment Per Farm	\$150,171	\$97,807	\$100,966	\$125,488	\$114,825	\$174,160
% Of Farms with Interest Expenses	27%	25%	27%	32%	27%	33%
Average Interest Expenses Per Farm	\$20,609	\$21,529	\$6,964	\$14,298	\$8,660	\$19,781
Average Labor Cost Per Hired Farm Worker	\$20,968	\$16,131	\$18,175	\$18,976	\$17,484	\$21,657
% of Farms with Contract Labor Expenses	11%	14%	<1%	8%	7%	8%
Average Contract Labor Cost Per Farm	\$172,113	\$11,750	NA	\$62,224	\$10,814	\$52,103
Average Production Expenses Per Farm, Total	\$232,430	\$118,299	\$108,135	\$159,379	\$85,558	\$201,523

Debt is measured by the percentage of farms that reported interest expenses as a production cost in the Census of Agriculture, whether or not that debt is secured by real estate. Approximately 27%

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of farms in Ulster County pay interest expenses, with about half of the farms having loans secured by real estate. Average interest expenses are slightly above the state average and just below the interest expenses reported by farms in Dutchess County.

As previously noted, labor costs comprise a significant share of production expenses for farm operations in Ulster County. The average labor cost per worker in the County is just below the state average, but somewhat higher than in neighboring counties. This is probably due to the concentration of apple orchards, which are more labor-intensive than other types of farms.

Average farm production costs are much higher in Ulster County than in the state or in any of the neighboring counties. A closer look at the cost of various farm expenditures revealed two culprits: agricultural chemicals and contract labor. In 2022, the cost of agricultural chemicals including herbicides and fungicides averaged about \$40,000 per year in Ulster County, compared to approximately \$18,300 in Orange County and much less, \$6,254, in Dutchess County.¹⁹ The cost was much higher, however, in Wayne County, New York's top apple producer, where agricultural chemicals averaged about \$53,000 per farm. In fact, average farm production expenses are very high both in Wayne County and in Orleans County, #3 in the state in apple production.

Ulster County farms also incurred significant expenses for contract labor, as Table A2-8 shows. Contract labor, according to the USDA, "includes [costs for] contractors, crew leaders, cooperatives, or any other organization hired to furnish a crew of laborers to do a job that may involve one or more agricultural operations," but *not* contractors hired to make capital improvements. Expenditures for contract labor in Ulster County increased sharply from 2017.

¹⁹ Per T. Schmit, et al, "Economic Contributions of the Apple Industry Supply Chain in New York State," previously referenced, agricultural chemicals are the second-largest expense for apple farms in the state.

Appendix 3. Conversion Pressure on Farmland

Significant development pressure exists in Ulster County (see Change in Assessment 2014-2023 map and Recent Development maps in Appendix 1). An analysis of parcel and assessment data shows that between 2014 and 2023:

- 2,083 new homes were built in Ulster County on 13,577 acres based on year-built data within the tax parcel database.
- The number of parcels coded as having a residential use increased from 59,840 to 61,416 (222,087 acres and 227,2936 acres, respectively).
- The number of parcels assessed or “site used” for agriculture rose from 814 parcels to 839 parcels (37,744 acres and 38,456 acres, respectively).

Table A3-1. Change in Primary Assessment, 2014-23

	Parcels	Acres	Current Active Farmland Acres	Parcels Currently with an Agricultural Use
Ag Converted to Residential	86	1,620	569	32
Ag Converted to Vacant	18	357	164	12
Ag Converted to Other	7	445	236	4
Total Ag Conversions	111	2,422	969	48
Converted to Ag	67	2,990	1,063	54
Other Converted to Residential*	1,818	12,694	431	59

** Several parcels with homes and DEP easement coded as Water Supply in 2023*

Another way to look at changes is by comparing land classification data from different years. The land classification data is based on 30-meter resolution satellite imagery that is classified based on the dominant spectral signature of each pixel. By comparing 2016 to 2021 land cover data, we see a decrease in agricultural land area and an increase in residential land area (Table A3-2). Specifically, there has been:

- A loss of herbaceous land cover (33% - 1275 acres)²⁰
- A small decrease in agricultural land cover types (-2.5%)
- A slight increase in developed land acreage (+0.3%)

²⁰ The majority of this change from herbaceous is 1,000 acres that moved to Shrub/Scrub land cover, followed by 530 acres that moved to Deciduous Forest, 390 acres that moved to Mixed Forest, and 140 acres that moved to hay/pasture. The remaining land classes is less than 100 acres, with the highest being 86 acres of Evergreen Forest. Herbaceous land cover made up only 0.5% of all the land cover in the County in 2016. This represents a net change so while some acreage changed from herbaceous to a different land cover, other areas changed from some other land cover to herbaceous.

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- Little change in forested, or wetland acreage
- A more significant change in barren land (23%) and shrub/scrub lands (12%)

Table A3-2. 2016 to 2021 Changes in Land Cover			
	2016	2021	Change
Herbaceous	3,845	2,570	-33.2%
Hay/Pasture	47,570	47,430	-0.3%
Cultivated Crops	7,204	7,181	-0.3%
All Ag Land	58,618	57,181	-2.5%
Developed, Open Space	39,585	39,248	-0.9%
Developed, Low Intensity	16,150	16,307	1.0%
Developed, Medium Intensity	7,366	7,712	4.7%
Developed, High Intensity	2,517	2,579	2.5%
Developed, All	65,617	65,845	0.3%
Deciduous Forest	357,435	357,863	0.1%
Evergreen Forest	28,759	28,815	0.2%
Mixed Forest	156,959	157,284	0.2%
Forest, All	543,153	543,962	0.1%
Woody Wetlands	48,862	48,724	-0.3%
Emergent Herbaceous Wetlands	2,328	2,848	22.3%
Wetlands, All	51,190	51,572	0.7%
Open Water	21,564	21,787	1.0%
Barren Land	1,832	1,419	-22.6%
Shrub/Scrub	1,744	1,952	11.9%

Since land rented from non-farm owners is an important resource for farms in Ulster County, we evaluated changes in the ownership of agricultural lands to identify if there have been significant changes taking place. About 26% (716) of all parcels identified as having a primary or secondary agricultural use have non-local owners; that includes 8,066 acres of farmland, or 20% of all active agricultural acres in the County. Within Ulster County Agricultural Districts, there are 433 parcels with non-local landowners, 292 of which have an agricultural use, with 5,573 acres of active farmland.

Table A3-3 illustrates changes in land ownership patterns in the County. Between 2014 and 2023, there was a 1% increase in the total number of parcels with owners outside Ulster County. Among parcels coded as agricultural, non-local ownership decreased; it also decreased among vacant parcels, many of which are likely now coded as residential. Residential parcels, on the other hand, experienced an increase in non-local ownership. Although the County has seen an increase in non-local land ownership, it appears that the growth has occurred largely on residential parcels rather than on farmland.

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Table A3-3. Changes in Land Ownership Patterns, 2014-23					
	2014	% of Total	2023	% of Total	% Change, 2014-2023
Owners Outside Ulster County – All Parcels	15,945	18%	16,071	19%	1%
Owners Outside Ulster County – All Acres	139,788	19%	137,849	19%	-1%
Owners Outside Ulster County – Agricultural					
Owners Outside Ulster County – Parcels Coded as Agricultural	170	20%	164	20%	-4%
Owners Outside Ulster County – Acres Coded as Agricultural	8,363	22%	8,111	21%	-3%
Owners Outside Ulster County – Residential					
Owners Outside Ulster County – Parcels Coded as Residential	9,721	16%	10,596	17%	9%
Owners Outside Ulster County – Acres Coded as Residential	68,233	30%	71,271	31%	4%
Owners Outside Ulster County – Vacant					
Owners Outside Ulster County – Parcels Coded as Vacant	6,054	42%	5,311	36%	-12%
Owners Outside Ulster County – Acres Coded as Vacant	63,192	46%	58,467	43%	-7%

Appendix 4. Public Input Survey Results

Summary of Results - Ulster County Agriculture Survey

Conducted in the summer and fall of 2023, the Ulster County Agriculture Survey invited members of the public, farmers, and farmland owners to provide their perspectives on farming as part of the development of the updated Ulster County Agricultural and Farmland Protection Plan. The survey is divided into three sections, with questions appropriate for each group. Survey questions cover various topics related to farming, including challenges faced by farmers, opinions on land use, government support, and future plans. Among the key themes that emerged are concerns about land availability, the financial viability of farming, high taxes, development pressures, and the importance of preserving local agriculture. Respondents expressed a desire for more support for farmers, including financial assistance, educational programs, and infrastructure improvements. Some respondents also mentioned specific initiatives or organizations aimed at supporting local agriculture. Overall, the survey provides insights into the perspectives of residents, farmers, and property owners in Ulster County.

The 266 survey participants included:

- 166 members of the public
- 60 farmers
- 4 farmland owners

Results of Survey 1: General Public

Q2. Responses were received from individuals in all parts of Ulster County except the Towns of Hardenburg and Plattekill and the Village of Saugerties. The largest shares of respondents were from the Towns of Olive (17%) and Hurley (12%) and the City of Kingston (16%).

Q3 and Q4. 93% said farms are Very Important. People value farms for their healthy local food (97%), jobs and support of the local economy (90%), contribution to retaining community character (82%), environmental benefits (77%), and agricultural lands requiring less public infrastructure and fewer community services than residential or commercial uses (57%). 35 people offered additional information as to why farms and farmlands are important to them: e.g., farms are calming, beautiful, have many environmental benefits, and most frequently, ensure local resiliency and provide healthy local foods.

Q5. When making food choices, people value freshness and/or quality (94%), that it is locally grown (87%), its nutritional value (74%), and taste (61%). Of somewhat less importance are price (55%), convenience in purchasing the product (53%), and the product being organic (50%). Comments as to what is important to people when they buy their food also include its social impact, knowing the farmer, and whether the farmer is a woman, BIPOC farmer, or reflects diversity.

Q6. 82% of public participants regularly buy agricultural products grown or raised in Ulster County so these people represent dedicated local food buyers.

Q7. 71% buy their local foods at a farmers' market, or directly at a farm (66%). However, 56% buy from independent/specialty grocery stores. 37% buy local foods from chain grocery stores and 33% from a personal or community garden. 21% buy from CSAs.

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- Q8. Respondents feel it is easy (52%) to very easy (31%) to buy locally grown or raised agricultural products in Ulster County. 14% said it was not easy.
- Q9. 62% of respondents feel there has been a significant loss of farmland in Ulster County. Many are not sure (35%), but only 4 people (3%) said that there has not been a major loss of farmland.
- Q10 and Q11. 89% of respondents feel farmland should be better protected from being developed or converted to non-agricultural uses, and a similar percentage would support use of public funding for land conservation to protect agriculture. Only 4 people (3%) oppose spending public funds for this purpose.
- Q12 and Q13. 69% feel that agriculture is a topic of general importance to other residents; 26% were not sure. Conversely, only 39% said that agriculture is a topic of importance to municipal leaders; 49% were unsure and 13% said that agriculture is *not* important to municipal leaders.
- Q14. Many respondents offered comments about agriculture, expressing various concerns and perspectives related to local farming and land use. Several common themes emerged:
- Development Pressure and Land Use:** Many respondents expressed concerns about farmland being sold for housing or commercial development, leading to the loss of agricultural land. They mentioned issues such as zoning laws, the influence of developers, and the need for protections to preserve farmland.
- Support for Local Agriculture:** Numerous respondents emphasized the importance of supporting local farmers and agriculture. They advocated for measures such as tax reductions, incentives for farmers, and increased funding for agriculture-related initiatives.
- Environmental Sustainability:** There was a strong emphasis on environmentally sustainable agricultural practices, including organic farming, reducing pesticide and fertilizer use, and protecting natural habitats and wildlife.
- Community Engagement and Education:** Respondents highlighted the need for community involvement in agriculture through initiatives such as community gardens, educational resources, and programs to promote farming practices among residents, including home gardening, beekeeping, and raising chickens.
- Economic Viability:** Many of the participants expressed concerns about the economic challenges facing farmers, including rising costs, low profits, and access to affordable land. There was also discussion about the impact of climate change on agriculture and the need for resilience and adaptation.
- Cultural and Historical Significance:** Some respondents underscored the cultural and historical significance of agriculture in Ulster County, emphasizing the importance of preserving farmland and agricultural traditions for future generations.
- Q15. There was a diverse range of opinions and concerns regarding agriculture in Ulster County which are summarized as:
- Many believe that community gardens could provide both a sense of purpose and a solution to hunger.
 - There's a call for more educational resources and classes on gardening, beekeeping, and raising chickens.
 - Concerns about the cost and availability of housing for agricultural workers are raised.
 - Some advocate for a shift towards more sustainable agricultural practices, emphasizing soil restoration and biodiversity.
 - Protection of agricultural land from development is seen as crucial for preserving the county's identity and environment.

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- Support for local agriculture is widely endorsed, with calls for tax breaks, incentives, and protection of farmland.
- Organic farming is emphasized for its environmental and health benefits, with concerns about chemical use.
- Suggestions include promoting small affordable homes near farms and opening a food cooperative.
- There's a desire for more support and resources for farmers, including funding and education.
- The importance of local agriculture in addressing climate change is emphasized.
- Some express concerns about gentrification and displacement of local communities due to tourism and housing trends.

Results of Survey 2: Farmers

Q16. Farmers from throughout the County participated in the survey, with high concentrations from the Towns of Marlborough (17%), Gardiner (13%), and Rochester (13%). No responses were received from farmers in the City or Town of Kingston, the Towns of Hardenburgh, Rosendale, and Woodstock, and the Villages of Ellenville, New Paltz, and Saugerties.

Q17 and Q18. 71% of the farmers have all of their land and 7% have some of their land within a NYS Certified Agricultural District; 21% were not sure. Among those with land in an Agricultural District, 17% were in Ag District #1, 4% in Ag District #2, 6% in #3, and 6% in #4. More predominant was that 68% of farmers were not sure which Ag District they were in.

Q19. 72% of the farmers receive Ag Value Assessments, 21% do not, and 7% were not sure.

Q20. Of the 28 farmers who said that they lease land, 24 indicated that the landowners receive Ag Value Assessments.

Q21 and Q22. Most participants have been operating their farm in Ulster County for 20+ years (52%) or 10-20 years (21%). 5%, however, are new farmers, farming in the County for 2 years or less, and 10% have been farming here for 3-4 years. Most of the new farmers indicated that they came to Ulster County to farm because they had grown up in the County or nearby and returned to farm.

Q23 and Q24. The acreage owned by participating farmers ranged from 1 to 515 acres, and averaged 102 acres, with a median of 52. The number of acres rented from other property owners ranged from 2 to 650, and averaged 48 acres, with a median of 12.

Q25 and Q26. The survey respondents represent farms that grow and raise a wide diversity of agricultural products. The most common products among participants are fruits and berries (46%), vegetables for fresh market (38%), and hay (34%), followed by beef (26%), flowers for cutting (23%), herbs (23%), poultry for eggs (23%), and nursery and greenhouse products (16%). Other products grown or raised by more than one but fewer than 10 participating farms included, in order, horses/ponies/donkeys, corn for grain or seed, hogs/pigs, poultry for meat, maple syrup, mushrooms, grains, sweet corn, dairy, goats, heifers, sheep, honey, and soybeans. It is clear that many farms grow and raise multiple products. Nearly half of the participants identified fruits and berries or vegetables for fresh market as their *primary* product.

Q27. Most farmers (82%) have not made a major change in the past 10 years in their farm's primary product. Eleven farms have transitioned, for example, from dairy to crops, from fruit and vegetables to grain and hay or grapes to nut trees.

Q28 and Q29. Many of the farms represented among the survey respondents indicated that they

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engage in one or more farm-related activities and practices. Among the most common are agritourism activities (36%), grass-fed animal production (30%), value-added production or processing (30%), u-pick operations (28%), and organic production with USDA certification (26%). Others include a farm-based brewery, cidery, distillery, or winery (18%), organic production without certification (16%), solar energy for farm use (8%), and solar energy for electrical grid or off-site use (8%). Farmers who said that they have agritourism activities offer farm tours, farm stays, cider, tasting rooms, flower arranging workshops, summer camps, etc.

- Q30. By far, the most prevalent way that farmers distribute and sell their agricultural products is direct to consumer (84%). However, 30 farms, or 49%, also do wholesale. Only 2 farms sell directly to institutions such as schools, hospitals or prisons.
- Q31. Among farms that have direct to consumer sales, 76% have a farm stand, on-farm store, or a u-pick operation. 24% sell at a farmers' market in Ulster County and 20% at a farmers' market in New York City. Eight farmers (16%) have a CSA operation, 7 (15%) use an online marketplace, and 2 (4%) have a farm store offsite. A few farms sell products at craft fairs, farmers markets in other locations, and weddings, or offer local delivery.
- Q32. Among farms that have a wholesale operation, 62% sell to retail outlets such as supermarkets, specialty food shops, food cooperatives, etc. 18% sell wholesale to intermediaries such as distributors and food hubs and 14% to restaurants. Only a few farms have wholesale sales to food and beverage processors, florists, or flower stands.
- Q33. Asked if they were interested in expanding into new markets, 33% said yes, 26% said no, and 41% said they were not sure.
- Q34. Digital media are very common for advertising and marketing agricultural products to the public. 73% of the respondents said that they use social media, 50% have a website, and 42% use email. Other methods include roadside stand signs (46%), print media (22%), regional efforts such as Pure Catskills (17%) or special events on farm property (17%). About 10% do not advertise. Many farms use multiple marketing tools. Word-of-mouth advertisement was mentioned as another method to market products.
- Q35, Q36, Q37 and Q38. Asked to estimate the annual gross revenues of their farm, 12 respondents (21%) indicated that they grossed \$100,000 to \$249,999, 11 (19%) grossed \$500,000 or more, and 7 (12%) had gross revenues between \$250,000 and \$499,999. However, 48% of the farms have a gross annual income of less than \$100,000 with 30% earning less than \$25,000. About 38% of the respondents consider their farm their household's primary source of income, while 23% do not rely on the farm as a source of income. Twenty-four farms, or 39%, have secondary sources of income that supplement their farm income. About 43% of farmers consider their farms to be somewhat profitable. Only 2 farmers said that their farm is very profitable, while 22% said it was not profitable and 20% said they were break-even. Compared to ten years ago, 32% said their farm was less profitable, 33% said there was no change, and 35% said their farm was *more* profitable.
- Q38 (part 2). Reasons given as to why their farm is less profitable than ten years ago included:
- **Costs and Expenses:** Including labor, materials, fuel, taxes, equipment, repair parts, and interest rates.
 - **Financial Strain:** Financial difficulties due to increased expenses, stagnant product prices, and loss of income.
 - **Regulations and Legislation:** Labor laws and environmental permits impacting farming operations.
 - **Environmental Challenges:** Issues such as flooding and land management restrictions

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impacting crop yields and financial stability.

- **Competition:** From other well-funded farms, leading to market pressures and decreased profitability.
- **Labor Issues:** Including increased labor costs, the need to hire more employees, and difficulties in managing payroll expenses.
- **Political Factors**

Q38 (part 2). Reasons given as to why their farm is *more* profitable than ten years ago included:

- **Strategic Changes:** Transitioning to new breeds or crops, such as Wagyu cattle, cut flowers, or organic vegetables, to improve business practices and meet changing market demands.
- **Investment in Infrastructure:** Building new facilities, such as cold storage and packing facilities, and replanting orchards to increase efficiency and reduce production costs.
- **Experience and Maturity:** Gaining experience over time, leading to increased efficiency in farm operations and reduced spending on infrastructure and equipment.
- **Persistence and Adaptation:** Acknowledging the time it takes to become profitable, and the ongoing investment needed in the business and property to achieve efficiencies, despite challenges such as labor shortages.

Q39. Strengths of farming in Ulster County, according to farmers:

- Ability to provide for family and community
- Access to a consumer base seeking local organic food
- Agricultural districts
- Appreciation of the beautiful landscape
- Being able to work outdoors
- Clean water and air
- Climate conditions
- Close proximity to markets, including NYC
- Community support for local farms
- Educational opportunities
- Enthusiasm for farm produce
- Favorable growing conditions
- Friendly zoning laws
- Good soil and water quality
- Historical significance of agriculture
- Housing market trends
- Location near NYC and markets
- Preservation of land and sustainability
- Quality of life
- Supportive networks and organizations
- Tradition and regional culture
- Tourism opportunities
- Younger demographics with disposable income

Q40. Asked about potential actions related to their farms over the next five years, 33% of the respondents indicate they will increase acreage or production, 30% will stay the same, 25% will develop agritourism activities, 25% will diversify their crops grown or animals raised, 18% plan

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on decreasing acreage, and 17% intend to retire. 15% plan to sell land for non-farm uses, while 12% plan to sell or rent land to keep it as a farm. Only a few farms indicated plans to transition to a new crop or commodity, donate or sell development rights, or stop farming and pursue other employment.

Q41. About half the participating farms have a succession plan, while 43% do not, and 8% are not sure.

Q42. Actions that farmers felt would best improve their capacity to increase revenues, reduce costs, or reach additional markets included:

- Housing for farmworkers (44%),
- Affordable, high-quality farmland to purchase (35%)
- Processing facility for livestock (31%)
- Affordable, high-quality farmland to lease (28%)
- Aggregation and distribution facility for local farm products, like a food hub (28%)
- Assistance securing capital financing (28%)
- Cold storage facility for local farm products (28%)
- Business planning assistance (24%)

Actions selected less often by the respondents included marketing assistance (15%), succession planning assistance (13%), employee/workforce training (7%), and a processing facility for fruits and vegetables (7%).

Q43. 75% of respondents indicated that farmland should be better protected from conversion or development of non-agricultural uses.

Q44 to Q47. A series of survey questions asked respondents to indicate whether certain issues were major ones, minor ones, or not an issue for their farm. By scoring the responses, it was possible to identify the top 10 issues, as follows:

- Production costs relative to price received for agricultural products
- Changing weather patterns and weather extremes
- Farm equipment and machinery repair costs
- Difficulty finding labor (skilled or unskilled)
- Farm equipment and machinery acquisition costs
- Cost of labor (skilled or unskilled)
- Property taxes
- Land prices
- Availability of agriculture-related services and supplies for farms
- Fewer people interested in farming as a career
- Increased pest or disease pressure

Q48. An open ended question asked farmers to comment about the biggest issues facing their farm operation in Ulster County. Based on the statements provided, the responses can be categorized as follows:

Challenges and Frustrations:

- Feeling abandoned by representatives.
- Legislative changes impacting agriculture negatively.
- Increased taxes and restrictive land use regulations.

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- Difficulties in selling land.
- Financial struggles and declining profitability.
- Concerns about the future viability of farming.

Need for Support and Preservation:

- Calls for substantive support systems for agriculture.
- Preservation of farmland and agricultural heritage.
- Critique of agritourism and housing developments on farmland.
- Desire for dialogue between farmers and government officials.
- Protection of right-to-farm laws.
- Support for young farmers.
- Access to USDA programs and assistance.
- Importance of infrastructure for farming operations.

Environmental and Public Use Concerns:

- Opposition to using farmland for solar installations or housing.
- Preservation of publicly owned farmland for agricultural use.
- Advocacy for public access to farmland for agritourism.

Community and Governance Issues:

- Criticism of politicians and officials.
- Need for more proactive action rather than just conversation.
- Desire for better communication and understanding between farmers and residents.
- Concerns about the impact of tourism on farming communities.

Economic Considerations:

- High taxes and stagnant commodity prices.
- Corporate influence and greed affecting farm operations.
- Challenges related to competition and market conditions.

Q49. Other comments received can be summarized as follows:

- Some farmers feel it's time to sell or move on due to their inability to compete with rising costs and stagnant prices.
- There's a call for county programs to assist farmers with sale, transfer, or donation of development rights.
- Concerns are raised about the impact of conservation efforts on younger farmers' ability to retire.
- Suggestions include creating tax-funded models for land protection and providing financial support for young farmers.
- Some criticisms are directed toward decisions that were perceived to prioritize personal agendas over farmers' interests.
- Farmers express struggles with high taxes, lack of services, and labor shortages.
- There's dissatisfaction with governmental support for agriculture and a sense of abandonment by representatives.
- Various concerns are voiced about the preservation of farmland and opposition to alternative uses like solar installations.

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- Suggestions for improvement include better access to USDA programs, infrastructure development, and addressing taxation issues.
- Farmers express frustration with public perception, customer attitudes, and the challenges of running agricultural businesses.

Several interesting differences were observed in the survey results of farmers based on their profitability (as identified in their responses to Questions 37 and 38). These are listed as follows:

More Profitable Farms

- Have more direct-to-consumer sales than less profitable farms
- Use more marketing methods
- Are more likely to have a website
- Lease more land that receives an Agricultural Value Assessment
- Have more diversity of products
- Are more likely to be vegetable farms
- In the next five years, are more likely to be seeking more acreage or keeping their operations the same, and are less likely to be planning to retire
- Have fewer farms with transition plans
- Are not as interested in having farmland protected from conversion to non-agricultural uses
- Identify global consolidation as more of a major issue than less profitable farms
- Are more interested in farmworker housing

Less Profitable Farms

- Are more interested in expanding into new markets
- Are more likely to be fruit and berry farms
- In the next five years, are looking to take different and more actions including decreasing acreage/production, pursuing agritourism activities, using conservation easements, retiring, selling their land, or getting out of farming entirely
- Have more issues with development pressure, and loss of farmland to non-farm uses like housing
- Perceive a lack of support for farming by the public as a major issue
- Are more likely to sell wholesale
- Are more concerned about liability and risk management
- Are more interested in aggregation and distribution facilities and cold storage facilities than more profitable farms
- Are more interested in securing capital financing
- Are more interested in business planning assistance and marketing assistance
- Are less interested in farmworker housing

Results of Survey 3: Farmland Owners

There was a very small response by farmland owners to the survey (four).

Q50. Farmland owner land holdings ranged from 2 acres to 280 acres.

Q51. Farmland owner respondents were from towns of Esopus, Gardiner, New Paltz and Rochester.

Q52 and Q53. Two farmland owners indicated their land was in a NYS Ag District and two indicated

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they were not sure if their land was in a NYS Ag District. None of the 4 farms were sure what specific Ag District their land may be located in, however.

Q54. Positive features of farming in Ulster County were identified as having benefits of agricultural tax exemptions, the beauty preserved by preventing overbuilding, the support from agencies like Ulster County SWCD, and the access to fresh produce and markets. Also noted was easy access to knowledgeable individuals and equipment sharing. Additionally, the favorable climate and strategic location near major markets contribute significantly to the local economy.

Q55. Two of the farmland owners received an Ag Value Assessment, one did not, and one was not sure.

Q56. A wide variety of agricultural activities take place on farmland that is rented. Most common were growing fruits or vegetables, specialty crop growing, and use of buildings for storage or animals. Some farmlands had field crops or were used for forest land.

Q57. Three of the four respondents indicated they would continue renting the same number of acres for farming. One farmland owner indicated they would be selling their land for agricultural use within 5 years. One also indicated that they may increase land availability for agriculture.

Q58. Issues identified by farmland owners included cost of land to farmers, farm worker housing, difficulty making a living farming, taxes, and development.

Q59. Some additional comments received included funding farmers to produce local organic food, educating the community on what it takes to farm, and the importance of farms for the environment. Another comment was about the importance of continuing small farming in Ulster County and the need to maintain local, fresh produce. Finally, one comment was added about the difficulty some farmers or farmland owners have had with farming when there is a conservation easement on the land.

Appendix 5. Farms and Farmland Data

Farms and Farmland²¹

A farm is defined by the U.S. Department of Agriculture (USDA) as a place that produces and sells or normally would sell at least \$1,000 of agricultural products during a given year. The Census of Agriculture reports that Ulster County had 486 farms in 2022, the same number reported in 2012 and 9% fewer than the 530 farms reported in the 2002 Agricultural Census. Farmland covered about 10% of the County’s total land area.

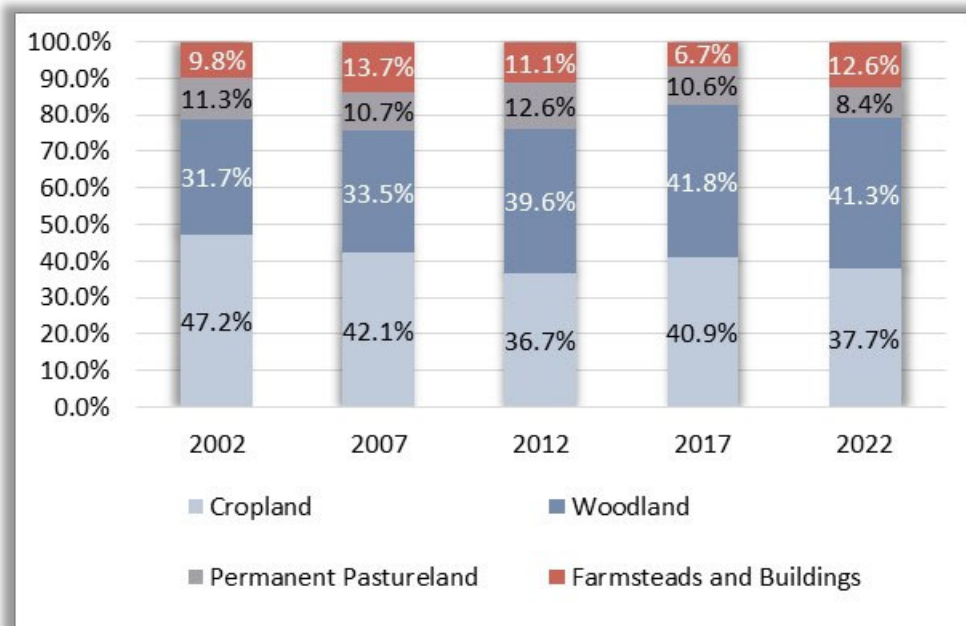


Figure A5-1. Land in Farms According to Use, Ulster County

Source: U.S. Census of Agriculture

Of the total farmland acreage, about 41% was woodland associated with the farm operation, 38% was cropland, and 8% was permanent pasture; land in farmsteads and buildings covered the remainder. Among the changes to the composition of farmland in Ulster County between 2002 and 2022 were the loss of nearly 12,000 acres of cropland, a 30% decline, and the addition of about 3,700 acres of woodland acreage, a 14% increase.

Farm Size

The average size of farms in Ulster County declined from 157 acres per farm in 2002 to 150 acres in

²¹ Unless otherwise noted, the data used in this section are from the U.S. Department of Agriculture’s Census of Agriculture. For more information about the Census of Agriculture, see Appendix 2.

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2022. Both figures are below the New York State averages of 206 and 212, respectively.

In terms of the distribution of farms by size class, the largest grouping in 2022 was farms of 10 to 49 acres (38%), followed by those with 50 to 179 acres (36%). Since 2002, Ulster County has experienced the fastest rates of decline among mid- and large-sized agricultural operations: farms with 500 acres or more (-51%) and those with 180 to 499 acres (-42%). In fact, the only growth over the past 20 years was in the number of small farms with 10 to 49 acres.

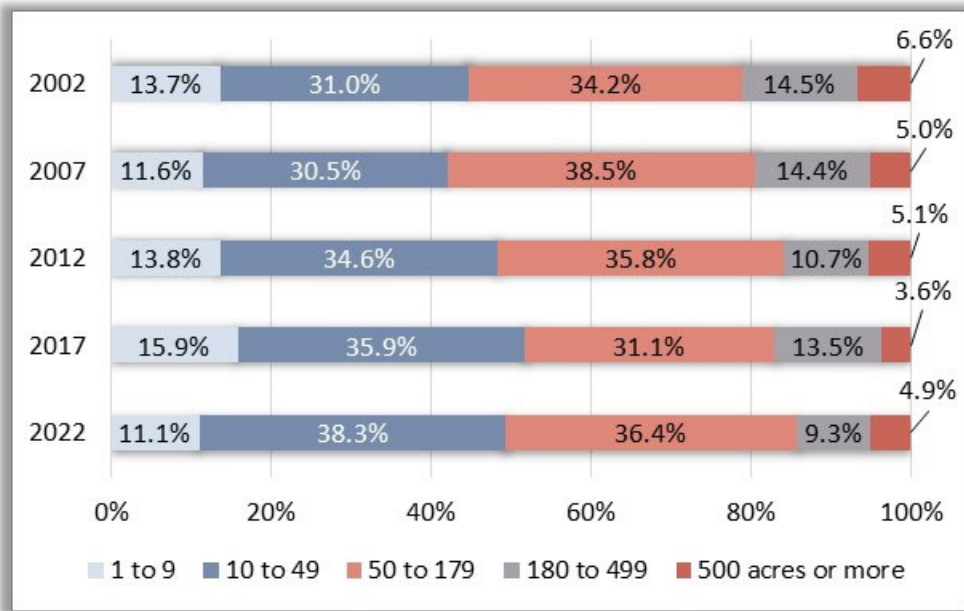


Figure A5-2. Distribution of Farms by Acreage, Ulster County
Source: U.S. Census of Agriculture

Crops

More than 30 different crops are grown in Ulster County. The top crops based on acreage are apples (7,990 acres), forage (7,932), vegetables harvested for sale (1,282), soybeans (979), and corn for grain (866), according to the 2022 Census of Agriculture. Sweet corn, pumpkins, and tomatoes were the vegetables with the most acres in production; other vegetables included snap beans, broccoli, carrots, cucumbers, lettuce, bell peppers, potatoes, and squash. Most of the vegetables are grown for the fresh market rather than processed uses.

U.S. apple growers harvested 9.5 billion pounds in 2022, with 14% or 1.35 billion pounds of apples produced in New York. Of utilized production in New York, 668 million pounds were for the fresh market and 677.5 million pounds were for processing. Fresh apples receive a higher price per pound than apples sold for processing. (Source: USDA, National Agricultural Statistics Service.)

Between 2002 and 2022, Ulster County experienced a steady reduction in the number of acres dedicated to vegetable production, with a net loss of 62%. Acreage devoted to forage crops and corn for grain also declined over the period.

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Following a large decline between 2007 and 2017, the County saw an increase in acreage used for growing apples. Total land in orchards was down 42% from about 15,000 acres in 1969 but is reported to have increased since the 2017 Census. Ulster County was #3 in the State in 2022 in both the number of orchards and land in orchards, after the counties of Wayne and Chautauqua.

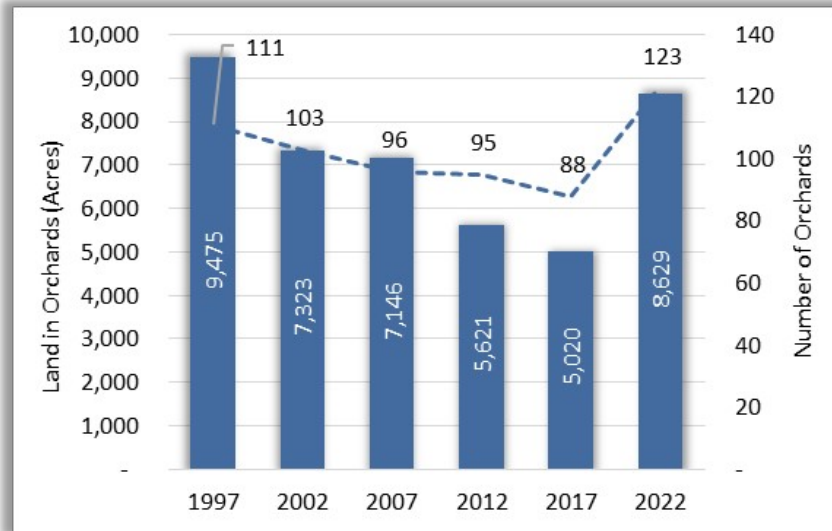


Figure A5-3. Land in Orchards, Ulster County
Source: U.S. Census of Agriculture

According to the Hudson Valley Research Lab, which supports fruit and vegetable production in the region, the fruit growers in Ulster County are all family farms, multigenerational enterprises that are often vertically integrated, with their own cold storage facilities and distribution channels. Some are entirely wholesale establishments that supply retailers twelve months a year; others sell to consumers at on-farm markets and through “pick-your-own” operations. Aside from apple cider, there is not much processing of the fruit, as the money is in the fresh product (this is reflected in the price per pound paid to the farmer: fresh, unblemished fruit commands a higher price than fruit for processing).

	2002	2007	2012	2017	2022	Change, 2002-22
Apples	6,365	6,388	4,819	4,604	7,990	26%
Forage (all)	17,581	12,973	11,063	8,708	7,932	-55%
Vegetables for sale (all)	3,381	3,097	2,678	1,978	1,282	-62%
Soybeans	NA	NA	279	405	979	NA
Corn for grain	1,559	1,316	1,392	1,218	866	-44%
Grapes	319	171	202	187	333	4%
Cultivated Christmas trees	187	340	130	302	222	19%
Nursery stock crops	78	765	NA	NA	240	208%

Source: U.S. Census of Agriculture

More than 90% of the land in orchards in Ulster County is devoted to apple production. Grapes and peaches are grown on 333 and 133 acres, respectively. Other orchard fruits produced in the County are plums, pears, and sweet cherries. In addition to the orchards, about 80 acres in the County support the production of berries, mainly strawberries, blueberries, and raspberries.

Other crops with additional acreage in production since 2002 included grapes, cultivated Christmas trees, and nursery stock crops (e.g., ornamentals, shrubs, shade trees, flowering trees,

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evergreens, and fruit and nut trees grown outdoors).

Plants, Flowers, and Greenhouse Products

The Census of Agriculture reports that 50 farms and greenhouses in Ulster County produced annual bedding/garden plants, cut flowers, potted flowering plants, perennials, foliage plants, and other related products in 2022. These operations had 56 acres in the open and nearly 234,000 square feet under glass or otherwise protected. The square footage used to grow bedding and garden plants declined by about 28% between 2002 and 2022. Other notable trends in the County include an increase in cut flower operations (from 14 to 25) and growth in the square footage devoted to producing greenhouse vegetables, fresh-cut herbs, and vegetable transplants.

The 2022 Commercial Floriculture Survey conducted by the USDA ranks New York #6 in the U.S. in floriculture sales and #2 in the country in the number of floriculture operations.

As of January 2024, Ulster County had 78 nursery growers and greenhouses licensed by the NYS Department of Agriculture and Markets. Some operations grow nursery stock only (typically trees and shrubs), some grow only greenhouse crops (such as flowers, plants, and vegetables grown indoors), and others are combined nursery and greenhouse operations.

Livestock

Top livestock on farms in Ulster County in number of head in 2022 were horses and ponies (1,693), beef cows (1,021), sheep and lambs (559), broilers and other meat-type chickens (520), goats (433), and ducks (340). With very few dairy farms left, milk cows dropped to 181 head from 984 in 2002. Virtually all types of livestock and poultry except ducks experienced a net reduction in head between 2002 and 2022.

	2002	2007	2012	2017	2022	Change, 2002-22
Horses and ponies	1,816	1,754	2,502	1,594	1,693	-7%
Beef cows	1,260	1,753	1,350	774	1,021	-19%
Sheep and lambs	664	471	488	993	559	-16%
Broilers and other meat-type chickens	NA	2,655	1,547	1,395	520	NA
Goats, all	815	569	330	566	433	-47%
Ducks	265	576	788	296	340	28%

Source: U.S. Census of Agriculture

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GIS-Based Agricultural Land Use Data

GIS mapping and analysis of land use and parcel data in Ulster County offers additional information about the current status of agriculture in the County. The data presented below are correlated with the maps in Appendix 1; the maps are also included on the GIS Hub for online viewing.

To determine the amount of land in agricultural use within the county, we performed a GIS-based land classification analysis. The identification of active farmland was a multistep process. We first used Esri's Deep Learning tools to identify "low vegetation" in the 2022 0.6-meter resolution USDA NAIP imagery for the county. The imagery was clipped to areas that included obvious agricultural activity to expedite the analysis time, so for example, areas in the Catskill Mountains were not included as it is almost entirely forested.

However, we did not ignore these areas and included USDA Cropland 2022 data for the county, excluding the codes for developed areas, forested areas, and wetlands for areas outside of our imagery analysis. We also utilized the Cropland data, in combination with parcel data and farmland soils to screen out "low vegetation" which was unlikely to be agricultural-related (lawns, golf courses, ball fields, etc.). We also removed all potential farmland that was under an acre as it was likely lawns, grass road buffers, or minimally productive agricultural land. We further refined the farmland layer by intersecting it with the county parcel layer and then removing "fields" less than an acre for properties coded as vacant, and less than 3 acres for parcels with non-vacant uses (residential, commercial, industrial, etc.) that did not specifically include agriculture.

Finally, we did some manual checking to modify farmland boundaries, add missing farmland, and delete areas that were clearly not farmland. The exception to the above methodology was for the Town and Village of New Paltz, where we had recently created a detailed farmland layer, modified from the county's 2013 1-meter landcover data. Thus, we merged the data from the 2021 New Paltz Natural Resources Inventory (NRI) with the rest of the county data created for this project.

Using the derived active farmland layer, in combination with Ulster County parcel data, we were able to identify the majority of parcels in the county that have an agricultural use, as summarized in Table A5-3, below. "Primary" agricultural parcels are those that are classified by the local tax assessor as having an agricultural use (100 class codes in the assessment manual). "Secondary" agricultural parcels are those coded by the assessor as something other than an agricultural use or vacant, typically a residential use.

Farmland Parcels and Types

Based on our analysis, there are 3,222 parcels, comprising 110,693 acres, with 41,095 acres of farmland, having some level of agricultural activity. Of those, there are 852 primary agricultural parcels (those parcels coded as agriculture by the assessor) totaling 38,336 acres with 20,075 acres of active farmland (49% of the county total). Forty-seven of those parcels are considered protected via an easement or are fee-simple owned. There are more parcels (1,345) considered secondary agricultural parcels (those parcels having agricultural uses but coded as something

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other than agriculture) than those having primary agricultural uses. Secondary agricultural parcels total 50,976 acres, and have approximately 16,500 acres of active farmland, or 40% of the active farmland in the county. Approximately 10% of the active farmland in the county is on the 850 agricultural parcels coded as vacant.

Table A5-3. Parcels Classified as Agriculture in Ulster County (see also Agricultural Districts and Agricultural Parcels Map)				
	Parcels	Parcel Acres	Farmland Acres	Protected Parcels
Primary Agricultural (Parcels coded by the Assessor as having an agricultural use (100 class codes)	170	5,753	2,236	5
Primary Agricultural with Assessment (parcels coded by the Assessor as having an agricultural use and receive a NYS Agricultural Assessment)	682	32,583	17,839	42
Secondary Agricultural (parcels that are coded as something other than agriculture by the assessor, but are receiving an agricultural tax assessment)	516	19,315	7,651	25
Apparent Secondary Agricultural (parcels that are coded as something other than agriculture by the assessor, but appear to have an agricultural use based on the presence of agricultural land based on imagery analysis)	829	31,661	8,873	46
Vacant with Agricultural Assessment (parcels coded as vacant by the assessor (300 class codes) and are receiving an agricultural tax assessment)	260	6,385	979	20
Vacant with apparent Agriculture (parcels coded as vacant by the assessor (300 class codes), but appear to have an agricultural use based on the presence of agricultural land based on imagery analysis)	590	11,195	3,177	19
Apparent Minor Agricultural (less than 3 acres) (parcels that are coded as something other than agriculture by the assessor, but appear to have a minor (less than 3-acres) agricultural use based on the presence of agricultural land based on imagery analysis)	175	3,802	340	5
Total	3,222	110,693	41,095	162
<i>Source: Ulster County Tax Parcel Data, Ulster County Real Property 2023 and land classification by Upstate GIS, 2024</i>				

Based on an analysis of the ownership of the secondary and vacant agricultural parcels, 1,541 parcels (13,472 acres), or 48% of all agricultural parcels are estimated to be rented lands (33% of all farmland acres). Locations of these potential rented lands are shown on the Potential Rented Land map.

Parcel data also offers insight into the type of agricultural uses taking place in Ulster County (See

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Agricultural Types map). Table A5-4, below, reiterates Agricultural Census data showing the diversity of crops grown in Ulster County. In both acres and number of parcels, orchards are the crop with the most parcels and acreage in the County. This is followed, in order, by field crops, horses, truck crops, and cattle/pigs. Less than 1,000 acres are devoted to dairy cattle. While there is a diversity of agricultural land uses, other types shown in the table have small acreages and few parcels devoted to them.

Table A5-4. Agricultural Types (see also Agricultural Types Map)			
	Farmland Acres	Parcel Acres	# of Parcels
Christmas Trees	20.9	42.4	4
Vineyard	191.8	305	14
Truck Crops	1,408.8	2,727.7	50
Sugar Bush	0	8.4	3
Specialty Farm	45.3	252.4	7
Sheep	55.9	115.9	2
Poultry	29.9	38.4	1
Other or Unknown	2,221.2	7,189.8	201
Other Livestock	116.5	308.5	7
Orchard-Fruit	6,948.3	12,157.6	383
Orchard	950.1	2,090.1	53
Nursery and Greenhouse	91.4	499.3	30
Livestock	118.8	290.1	7
Horses	1,868.2	3,609.4	75
Honey/Beeswax	0	8.6	1
Field Crops	6,867.9	11,893.3	229
Dairy	953.3	1,518.4	22
Cattle/Pigs	1,370.2	4123.8	46
Other/Unknown Agricultural Uses	17,854.2	63,503.3	2,083

Source: Ulster County Tax Parcel Data, Ulster County Real Property, 2023, local knowledge and imagery interpretation

Appendix 6. Identification of Important Farmland

This section outlines Ulster County’s effort to define and locate priority farmlands that are key to long-term agricultural viability in the County. New York State-funded agricultural and farmland protection plans require that the County work to identify important farmlands. Not only is it a requirement, but it is critical information needed by landowners who elect to participate in New York’s Farmland Protection Implementation Grant (FPIG) program.

Landowners, through FPIG, voluntarily place a conservation easement on their agricultural land/farmland to protect the land from future development. Through the FPIG application process, the application will need to show the land is identified in the County’s Agricultural and Farmland Protection Plan (Ag Enhancement Plan) as being ‘important.’ Knowing where priority farmlands are located can also be important to Ulster County municipalities as they work on comprehensive plans, open space plans, town-level agricultural and farmland protection plans and other similar efforts.

How are important farmlands in Ulster County identified? Many factors are taken into consideration such as soils, farmland size, development pressure facing the farm, location, and other features. While soils are critical, other factors are also important, and the factors are chosen to be consistent with local conditions. For instance, the size of a farm, whether in a NYS Agricultural District or not, closeness to a water resource, or frontage along a highway are all criteria that contribute to defining important farmlands. This section describes the method used in Ulster County to identify, score and map important farmlands.

Ulster County Parcel Rating Methodology

To effectively identify and prioritize the thousands of acres of land potentially available for agricultural conservation in Ulster County, a Geographic Information System (GIS)-based parcel rating system was created using local criteria developed by the County and project consultants. The rating system first includes criteria that define “important farmland” in Ulster County and then gives points to each criterion depending on specific conditions on a specific farm (see Table 2 in Chapter 6 for scoring details). Each farm in the County is evaluated this way and the farm-related criteria are scored. Ulster County values all farmland but recognizes that some farmlands have more important farmland criteria than others.

Identification and Prioritization

The farm priority scoring was based on approximately a dozen criteria as detailed below. For this analysis, a "farm" is either a single parcel or a grouping of parcels of contiguous common ownership. Contiguous was defined to be parcels that touched one another or were across a right-of-way from one another.

Parcels that were included in the analysis met at least one of these criteria: coded as agricultural use in the tax assessment records, currently are receiving an agriculture value assessment,

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regardless of coded use such as abandoned agriculture, residential with agricultural use, or other uses that were determined to include agriculture, based on reviewing recent ortho imagery. Vacant and rural residential, abandoned agricultural land, and residential vacant land over 10 acres were also included in the analysis as these parcels could potentially support agriculture in the future.

Once the parcels were identified for analysis, they were merged into “farms” as previously defined and then they were assigned points based on the criteria (see Chapter 6, Table 2).

Overall, parcel size, the amount of land available for farming, soils, the amount of water buffer available, and proximity to other conserved lands are criteria weighted more than others. Other important criteria included proximity to active farmland, to water and sewer within an area of increased development or proximity to a village or CDP, farms with agricultural assessments, and proximity to 3-phase power.

These criteria used in the identification of important farmlands are explained as follows:

- Parcels that are used primarily for agriculture, identified in the data as active agriculture in the assessment data (or at least a portion of a farm made up of several parcels) or identified as vacant but receive an agricultural tax exemption, and that are larger in size, were given more points.
- Secondary agricultural use parcels were those that were identified as something other than agricultural use in the assessment data but were either receiving an agricultural assessment and/or were determined to have active farmland on the parcel. More points were assigned for larger parcels as the size of the parcel can impact farm viability and value.
- Farms that have a higher percentage of their land in active farming are given more points. More land available on a farm means it is more likely to stay in farming. Acres of active farmland is also a scoring criterion for state farmland protection funding. See “GIS-Based Agricultural Land Use Data” in Appendix 5 for a description of how the active farmland was determined.
- High-quality soils (Prime or Statewide Importance) are important to many viable, sustained farm operations. The percentage of high-quality soils on a farm is also a scoring criterion for state farmland protection funding.
- Protection of water resources is important for farm viability throughout the county. A 100-foot buffer layer was created for streams, surface waters and USFWS NWI mapped wetlands. The buffer area that each parcel encompasses was then calculated. Parcels that contain over 10 acres of water buffer area have the potential to have a significant positive impact on water quality depending on how those areas are managed.
- Farms that were adjacent to lands already conserved were given more points. Being adjacent to other lands that will remain undeveloped or farmed have a higher chance of remaining in agriculture and can create core areas of critical farmland. Similarly, parcels

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that were adjacent to active farmland were also given more points.

- When farms are adjacent to other farms, there is less fragmentation, fewer nuisance complaints, and higher chances the land will stay in farming. Parcels that have close proximity to other active farmland receive higher points than those that are farther apart from each other.
- A ½-mile buffer on each of the villages and Census Designated Places (CDP) in the county was created to evaluate potential development pressure. Farms that are close to villages and CDPs could be at risk for development as these population centers expand or residents and businesses may want to locate close to a village to take advantage of village amenities but avoid paying village taxes.
- Another development pressure factor is the amount of road frontage a parcel has along U.S., State or County roads; more frontage allows for easier subdivision potential. Also access to larger roads can be beneficial for business development. The total frontage of parcels (or combined farms) was calculated based on the length of the parcel line(s) along the road right-of-way.
- When a farm is close to existing water and sewer infrastructure, there is a higher chance the land would become more valuable for other types of development so the closer a farm is to such infrastructure, the more points it received. This places emphasis on identifying these lands as having more risk for conversion than lands not able to access water and sewer. Additionally, some farms may need more water resources if they have some food processing or other activities on the farm that need water. In that case, being close to public water sources is important to maintain that farm.
- Parcels that are receiving an agricultural value assessment show a commitment by the landowner to maintain farming on the parcel. Parcels that receive an agricultural value assessment receive additional points in this analysis. Similarly, farms that receive a 480-a forest assessment also show a commitment to sustainable forestry, which is considered an agricultural use, and receive an additional point in the analysis.
- Another development pressure farms in Ulster County are facing is from large-scale solar development. Farms closer to locations having 3-phase power are more at risk for solar development than farms that are farther away and thus receive additional points.

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Results

A total of 6,405 farms were included in the analysis. These include those known to have agriculture as well as those that could potentially support agriculture. There are 3,222 parcels that have agricultural use per the analysis conducted for this Plan. For this analysis, several of those were merged into “farms” as some farms have multiple parcels.

The average total score was 8.4 points, with a median score of 7 and a range of 1 to 33 points.

The scoring results were broken into tiers, using an approximate standard deviation curve which groups more farms in the middle categories and highlights the outliers (both positive and negative).

As shown in Table A6-1 below, most of the actual farmland in Ulster County is average or better. The number of parcels ranked as “far above average” has the least number of parcels, but the most farmland acres than the other three categories combined (21,284 acres).

Tier	Parcels*	Acres	Farmland Acres	Parcels with an Agricultural Use
Far Above Average	439	43,146	21,284	429
Above Average	1,265	40,917	11,839	1,018
Average	2,325	71,782	6,171	968
Below Average	2,376	58,101	556	176

* includes “farms”: parcels with agricultural uses merged by common ownership that are contiguous with one another (including if only separated by road or utility right-of-way_

Appendix 7. Farm-Friendly Audits

Farm-Friendly Audit Methodology

To accomplish the audit, comprehensive plans, subdivision laws, and zoning regulations were evaluated in four towns (Gardner, Marbletown, Ulster and Marlborough). These towns were chosen as they are Ulster County towns having a significant amount of agricultural activity taking place.

Comprehensive plans, zoning and subdivision laws were evaluated against a series of questions designed to explore the level of farm-friendliness in each town. These questions are based on similar farm-friendly audits done throughout the State and region. The audit is not a criticism of any local law or plan but simply points out ways local land use regulations work with, or present challenges that farmers may face. In the final plan, the results of the Audit will help inform recommendations for strategies and actions.

The recommendations are also informed by guidance offered by the New York State Department of Agriculture and Markets through their “Guidelines for Review of Local Zoning and Planning Laws” (<http://www.agriculture.ny.gov/AP/agsservices/guidancedocuments/305-aZoningGuidelines.pdf>) and “Local Laws and Agricultural Districts: Guidance for Local Governments and Farmers” (<http://www.agriculture.ny.gov/AP/agsservices/new305/guidance.pdf>).

Farm-Friendly Criteria Used in the Review

The following questions are those used in these audits to explore farm-friendliness. The answers offer insight into the level of farm-friendliness in a community. A highly farm-friendly plan or land use regulation would positively address most of these criteria.

Comprehensive Plan-Related Questions

- Does the Town have a Comprehensive Plan?
- Is the Plan up-to-date (less than 10 years old?)
- Does the plan have a specific section addressing agriculture?
- Does the plan include any maps of agricultural lands, important farmland soils, agricultural districts, etc.?
- Does the Plan explore 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 Plan have a vision statement or goals that address agriculture in any way? Is there any visible demonstration of the value of agriculture to the community in the plan?
- Does the plan recognize agriculture as an important resource in Town?
- Does the plan recognize or reference a local or County agriculture and farmland protection plan?
- Does the plan include any data on farms and farmland? Acreage? Income or occupations from farming or other ag-census data?
- Does the plan establish policies towards farmland and farming?

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- Does the plan identify the value of farmland and farms to the community in some way?
- Does the Plan offer any recommended actions or strategies related to farming or farmland or ways to preserve or enhance farming?
- Does the Plan establish a policy and/or future actions related to conservation subdivision or clustering, ag overlay districts or other methods?
- Does the plan discuss NYS agricultural districts and ag assessments?
- Does the Plan consider farmland an important resource, recognize prime or soils of statewide importance, and encourage easements or other protections of that land?
- Is there a policy discussed for PDR, LDR or TDR?
- Is agriculture a consideration of where growth does or does not take place?

Regulations (Subdivision and Zoning)

- Does Subdivision Law address agriculture in any way?
- Does subdivision application ask for any submissions related to agriculture?
- Are conservation subdivisions allowed? Voluntarily? Mandatory? Does it address agriculture?
- Does the subdivision include siting of non-farm development in a manner that preserves farm use?
- Does the zoning regulation's purpose statement include a discussion of agriculture, or promote preserving agriculture specifically?
- Does zoning allow agriculture as a permitted use by right?
- Does zoning prohibit agriculture in any district other than hamlet centers or commercial areas?
- Are site plan reviews required in one or more districts for agriculture or ag-related uses?
- Are special use permits for agriculture or ag-related uses required in one or more districts?
- Is residential, higher density or commercial growth allowed in core farm areas or where a NYS Ag District exists so that conflicts may arise?
- Does the zoning specifically establish a local agricultural zoning district designed for agriculture, ag 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 non-farm construction or subdivision?
- Are innovative development patterns specifically designed to 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 and on-farm businesses?
- Are farm stands, farm retail markets, agritourism businesses, breweries, etc. allowed?
- Are farm processing facilities such as community kitchens, slaughterhouses, etc. allowed?
- Are farm stands limited to selling just products from that one farm or is that flexible?
- Do farm stands and other on-farm retail 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?

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- Do application requirements for non-farm uses 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 a NYS certified ag district? What farming activities take place on or near the site? Whether prime farmland soils are present?
- Do standards exist beyond SEQR that require the PB or ZBA to evaluate impacts of a project on agriculture?
- Do any design standards exist to direct building envelopes of non-farm development to areas on a parcel that would still allow farming to occur on remaining open spaces?
- Does the zoning define agriculture, agricultural structure, farm worker housing, agritourism, agri-business, and other ag-related terms?
- Are farm uses that are defined included in the Use Table?
- 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 ag zoned district? For example, can a farmer set up a brewery on-site and sell products on-site?
- 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?
- Is an ag disclosure statement on plans or plats required when development takes place in a NY certified ag district or otherwise recognize this?
- 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?
- Does the Town have regulations for solar and wind?
- Do solar regulations address development on farmed parcels or address development on farmland soils?
- Are personal windmills and solar panels allowed for farm use? With permits or permitted as of right?
- Does zoning establish any rules for manure storage or spreading or other water quality related rules on farms?

Results

Gardner

The Town of Gardner's Comprehensive Plan is 20 years old (adopted in 2004) and may not reflect current land use and agricultural conditions anymore. With that said, the Plan is farm-friendly in that it includes agriculture in the Vision statement and has a variety of recommendations to enhance agriculture as part of the landscape, open space, and the economy. The Plan forms a solid foundation for the land use policies found in the zoning. More recently, the Town's NRI includes a variety of farm-related maps that can help address farming, including those containing NYS Ag Districts, ag parcels, prime farmlands, soils of statewide importance, protected farms, the Wine Trail, and other habitat features associated with farms such as meadows > 100 acres in size.

Gardner also has a comprehensive Open Space Preservation and Acquisition Law (Chapter 165) and a Community Preservation Fund. This Chapter allows for the purchase and protection of lands

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for both open space and farmland. It defines agricultural lands, agricultural uses and production. It does limit agricultural lands as defined to those in a NYS Ag District AND those getting an agricultural assessment. While this covers most of the farms in Town, there may be farms outside the ag district or that do not get an agricultural assessment.

Zoning is from 2008 and incorporates many of the land use regulation recommendations made in the 2004 Comprehensive Plan. It is noted that many important natural features are protected via overlays (floodplains, Shawangunk Ridge, scenic areas), but there is not one for agriculture.

Evaluation of the farm-friendliness of Gardner's land use regulations includes the following observations:

- Zoning adequately defines Ag Data Statement, Agriculture, Commercial Horse Boarding, Farm Operation, Riding Academy, and Sugarbush.
- Purpose statements do include references to agriculture and strongly identify the importance of agriculture to the Town.
- Agriculture is allowed as a permitted use in all districts.
- All zoning processes require submittal of the Ag Data Statement, which is excellent.
- Minimum lot size for the RA district (which is where most agriculture is taking place) is 5 acres, with a 2 acres/du density.
- Agriculture is specifically exempted from most of their development standards, which is excellent, including the maximum nonresidential building footprint of 6,000, height limitations, scenic protection overlay regulations, fencing, and others.
- A very good section on protection of agriculture (220-46) exists and requires buffers to be placed by non-agricultural uses when adjacent to active farms
- It specifically exempts agriculture from height and dimension limitations. Some setbacks may still be required but those seem appropriate and probably are consistent with NYS AML 25-aa.
- However, large agricultural uses do need a minor site plan review for buildings 20,000 sf or larger, and > 35'. While a minor site plan review is understandable and may be consistent with NYS AML 25-AA, depending on the situation and location, it may also be deemed too restrictive for farms in the NYS Ag District.
- It is noted that the Agricultural definition in zoning is slightly different than the one offered in their Open Space Acquisition and Preservation Law.
- New and diverse farm operations are probably allowed because the definition includes growing, processing, and sale, but it is not clearly detailed. No other agricultural activities that we commonly see today (including a variety of ag-related businesses on-site, direct sales, agritourism, processing, etc.) are specifically defined or included in the Use Table. These also include common agricultural activities such as cidery/brewery/winery, CSAs (community supported agriculture), other kinds of direct sales, slaughtering, etc.
- Zoning does allow for use of multi-family dwellings for farmworker (including farm owner and family members), but it does require minor site plan review for farms that have more than 5 dwelling units. It does not address the use of mobile homes for farmworker housing, nor defines it specifically.
- Gardner has strong open space development policies, procedures and standards. Farmland is included in the conservation analysis. It has rural siting principles that also will

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assist in maintaining access to farmlands.

- Their Shawangunk Ridgeline Overlay is excellent. Agriculture is still permitted there as a permitted use.
- The Town also allows for Transfer of Development Rights from RA areas (where ag takes place) to hamlet areas and use of flag lots – both of which could assist in protection of farmed areas.
- Gardner’s weakest link in terms of being farm-friendly is in their Subdivision regulations. The law is quite old (1984) and does not mention the preservation of agriculture in its purposes, or anywhere else in the standards. There are no definitions, discussion of ways small-sale subdivisions can be designed to protect agriculture, use of building envelopes to ensure farm fields can be maintained, etc.

Marbletown

Marbletown has a 2005 comprehensive plan and a 2010 town-level agricultural and farmland protection plan. The agricultural and farmland protection plan is much more specific and comprehensive than the 2005 plan and includes data, maps, current agricultural conditions, detailed goals, and specific recommendations. The Agricultural and Farmland Protection Plan offers far more information and long-term planning for agriculture than the Comprehensive Plan does. The Town has a variety of other plans including a natural resource inventory (2005), various ecological and natural resource protection plans, a climate action plan (2019) and others.

The Town’s Comprehensive Plan includes agriculture in its vision statement, and broadly discusses the important role agriculture plays in the town. It indicates a desire to protect a critical mass of farmland, to enhance agriculture from an economic perspective and recognize agricultural lands as important open spaces, and offers general actions to achieve those goals.

Their code includes the Agricultural, Clean Water, Open Space Preservation and Acquisition law (2007) that establishes a voluntary process to protect land, including farmland. It also establishes a preservation fund that can be used to purchase and protect all open spaces, including farmland.

Evaluation of the farm-friendliness of Marbletown’s land use regulations includes the following observations:

- Zoning purpose statements do not mention agriculture or farmland.
- There is no specific district or overlay designed to protect agriculture.
- It does allow for a conservation subdivision that does allow for preserved open space to be used for agricultural purposes.
- Unlike its Plans, the zoning Use Table places restrictions on agricultural uses. It allows crop production in all districts as a permitted use, but not livestock. Road stands are a permitted use in the A districts but need a special use permit (SUP) in other areas. Animal production is a permitted use in the A districts, and needs a SUP in certain other districts, but it specifically excludes cattle feed lots, hog/pig/goat/sheep/horses/equine and apiaries. Commercial poultry requires a SUP. Where the A district overlaps the NYS Ag District, these rules could be seen as over-regulation of farm activities and not consistent

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with NYS AML 25-aa.

- Support activities for agriculture and forestry are allowed with a site plan if in an office or on an active farm. Support activities are not defined, however, so it is unclear if these cover value-added agricultural activities or not. Since value-added activities and farm diversification are critical components of agriculture in the County, it is unclear whether these would be allowed at all or whether a site plan review is required. Craft brewing is allowed in the Industrial-Business district only, and with a SUP.
- There are other farm-related uses allowed in various ways/places including farmworker housing for transient labor (not permanent) as a permitted use in the A1 and A2 districts. Allowance only for transient labor housing may not meet farmers' needs, as many need year-round help and thus this could contribute to the issue of lack of farm labor housing.
- It is important to note the confusion between those above land use rules, and those established in Zoning 200-38. This section is much more farm-friendly and is specifically oriented to agriculture. It contradicts much of what is in the Use Table. 200-38 allows for farm operations (nicely defined separately from agriculture) as a permitted use in all districts. This section is certainly more farm-friendly than the Use Table. It is unclear if any conflicts arise in the application of the Use Table vs section 200-38 in the Town, but the lack of clarity alone can cause challenges for farmers who wish to build, expand, or change.
- There are a variety of definitions offered in the zoning related to agriculture including Agriculture, Agricultural District, Commercial Horse Boarding Operation, Crops/Livestock/Livestock Products, Farm Operation, Greenhouse, Riding Academy and Road Stand. Most are adequate but there is a conflict between agriculture (used in the Use Table) and farm operation (used in section 200-38). It is not clear why both terms are used or needed.
- Housing densities where farms and residential districts overlap range from 1 to 4 acres minimum lot size. While a 4 acre minimum lot size would result in a lower density of development, 1, 2 or 3 acres could pose a density that increases conflicts with farmers, and promotes development, farm field fragmentation, lack of access to farm fields, etc.
- Barns and silos are exempt from height requirements, but also require additional setbacks, which may not be consistent with NYS AML 25-AA.
- Section 200-38 is another very pro-agricultural section and allows farm operations as a permitted use in all zoning districts. District setbacks need to be met however, and there are additional setbacks for temporary greenhouses, and unenclosed storage of manure. Other activities such as pick-your-own are also permitted uses. Occasional commercial/educational uses on farms (which are not defined) are allowed 2 times per year, and any other one that is more than 2 days or with 500+ people attending need a SUP. This section also sets slightly different rules for farm operations located outside the NYS Ag District.
- The Subdivision Law (2006) mentions agricultural lands as an important purpose for the subdivision regulations but has limited language that addresses subdivisions and agriculture. It does establish a conservation subdivision section, allows average density subdivisions to have land used for agriculture, asks the Planning Board to consider impacts on agriculture (169-23), and requires buffers to adjacent adjoining farmland in an open space subdivision design (169-49).

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Ulster

The Town of Ulster has a Comprehensive Plan adopted in 2007. This Plan includes agricultural protection in its vision statement and includes a full chapter on agriculture. The Plan itself shows ag districts and some relevant information on agriculture. Other maps are available through the County GIS system. The agricultural chapter details policies to support active agriculture and establishes actions to retain large blocks of farmland and offers recommendations including use of clustering, ridgeline protection, and others. It includes a goal to keep existing farmland and to maintain viability of farming. The included land use concept plan also considers and shows agriculture as an important land use and land use area.

Evaluation of the farm-friendliness of Ulster's land use regulations includes the following observations:

- Ulster has a separately adopted site plan law (Chapter 145) which specifically exempts agricultural uses from having to go through site plan review if the farms are greater than 5 acres and having at least 50' setbacks from property lines. While it is excellent that such farms are exempted from site plan review, small farms, of which there are many in Ulster County, would not be exempt. This could pose a challenge to new small and niche farms that could be beneficial to the Town.
- Their Subdivision Law (Chapter 161) was adopted in 1985 with some updates in 2006. There is no real attention given in the Subdivision Law to agriculture: It is not mentioned in the purpose statements, nor are there any subdivision layout requirements or guidelines designed to address non-farm development in farming areas.
- Zoning, Chapter 191, does not include agriculture as a topic of importance in its purpose statements.
- It does include several agriculture-related definitions including an Agricultural Operation, Farming, Farmers Market, Farming Operation, Farm Stand, Livestock Keeping, Nursery (retail and wholesale), and Riding Academy.
- Definitions treat agriculture differently than a farming operation, and further, livestock farms are separated from both agriculture and farming operations to be considered a different use in the Use Table. Like in Marbletown, there is likely to be confusion by having agriculture and farming operations as separate entities.
- Further treating livestock farms as something different than a farm operation, with different districts where it is allowed may place more regulatory challenges and barriers for livestock farmers. Within the NYS Ag District, this may be a restriction that would not be considered consistent with NYS AML 25-AA, or for being particularly farm-friendly.
- Agriculture, Farm Operations, Horse Boarding, And Livestock (Commercial), Farmers Market, and Nursery (Retail and Wholesale) are allowed as permitted uses (but with site plan review if less than 5 acres or having less than the 50' setback).
- Note that the definition of Farmers Market limits it to those run by a not-for-profit organization, which may limit such use in Town.
- Riding academies and vineyards are also allowed in the R60 district, as well as in RC, and OM (and I for vineyards) but with a special use permit. Note that when these land uses are within a NYS Ag District, the requirement for a special use permit for these types of farm

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operations may not be consistent with AML 25-AA and seen as an undesirable land regulation of farms.

- Agricultural buildings are not exempt from the height regulations.
- Farm stands are allowed but need to meet specific parking requirements.
- Signs, as well as off-site directional signs are allowed with Planning Board approval.
- There is no other language exempting agriculture or farm operations from all the lot size and dimension requirements so it appears as if setbacks, lot coverage, and other dimensions would have to be met by farms as well. This could pose considerable burdens on farms.
- It is noted that the Town's stormwater regulations (Chapter 88) also address agriculture via including definitions and regulations for agricultural stormwater runoff and farm operations.

Marlborough

The Town of Marlborough has an updated comprehensive plan adopted in 2017. It also has other plans such as a cultural resource survey, design guidelines for Route 9W, an LWRP for the waterfront, and Hamlet Area Plans.

The 2017 Comprehensive Plan significantly addresses agriculture in the Town. Agriculture is included in the Town's vision statement, and a long-term goal related to agriculture is established. The Plan includes a chapter, with some mapping, and some data but with strong discussion and recommendations to increase agricultural profitability and to protect farmland. It includes a variety of specific recommendations including use of conservation subdivision, PDR/TDR, easements, and establishment of maximum density. Their LWRP Law includes protection of agriculture in the waterfront area as one of its goals.

Evaluation of the farm-friendliness of Marlborough's land use regulations includes the following observations:

- A Right-to-Farm Law (2002) exists along with subdivision and zoning.
- The Subdivision Law (1994) defines an agriculture data statement, but then does not address use of such Ag Data Statement. The law does not include protection of agriculture among its purpose statements, and has no processes, standards or designs for subdivisions that specifically address agriculture when subdivisions take place.
- The Zoning, originally adopted in 1993, had several updates in 2009 directed at agricultural land uses.
- The law includes several ag-related definitions including Active Agricultural Farmland, Agriculture, Farm, Poultry-raising, Low Density, Roadside Stand and Wineries/Distilleries.
- Its purpose statement does include references to agriculture.
- The R-1 district allows agriculture as a land use but only on parcels that are > 10 acres in size. This may not be a problem except where the R-1 district overlaps the NYS Agricultural District and there appears to be a few parcels where there is overlap. This acreage restriction in a NYS Ag District is not particularly farm-friendly and is not likely to be consistent with the Ag District requirements.
- The primary area where agriculture is allowed is in the R-Ag-1 district. Here all agricultural

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uses and their accessory uses are permitted by right. Farm labor housing, roadside stands, and agricultural signs are also permitted by right.

- The Highway Development District also allows agriculture as a permitted right but farm and produce stands need a special use permit. It is noted that the use tables use the term ‘farm and produce stand’ but this term is not defined. Instead, the term ‘roadside stand’ is used.
- Some food processing may be allowed in the Industrial District.
- Mixed uses are specifically allowed in all districts; however, this term is not defined. Mixed uses on farms that allow a variety of uses may be beneficial to enhance agriculture, but it is not clear if this would be allowed or not.
- Farm buildings are exempt from height restrictions, but only when additional setbacks are required. This may be seen as unreasonable regulations in the NYS Ag District.
- Accessory buildings that are greater than 160 square feet must have a permanent foundation and there is no specific language that exempts farm accessory buildings from this requirement. This may be a challenge for placement of needed farm-related buildings.
- The zoning does exempt farm buildings from the rule that buildings can’t be closer to the road than the principal building.
- It is unclear if the rule requiring nonresidential uses to require fencing applies to agriculture.
- Residential clustering is allowed, but only in the R-1 district so the benefits related to this method would not be applied in the R-Ag-1 district where most farming takes place.
- Farms are exempted from the ridgeline protection standards.
- The Town’s site plan review section of the zoning does include language that requires site plans to contain information on active farmlands adjacent to a proposed project.
- Section 150-22 also requires non-farm uses to include additional buffers if the new use is adjacent to an active agricultural practice. Those agricultural practices, however, are tied to those as defined in the Town’s Right-to-Farm law, which has slightly different ag-related definitions than the zoning. The Right-to-Farm law more closely mirrors NYS AML 25-AA Section 301 definitions than in zoning, which is desirable, but also means that as it is written, the processing or retailing of farm products and merchandising may not be afforded the same protective buffers as agricultural lands producing crops.
- Allowable residential densities in the R-Ag-1 district (set at 1 acre) are very high. In the face of high development pressure, a build-out allowing 1 acre density has a high risk of making it hard for farms to compete long-term. This density is not considered consistent with long-term maintenance of farming.

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Farm-Friendly Criteria	Gardiner	Marbletown	Ulster	Marlborough
Comprehensive Plan and Other Related Plans				
Does the Town have a Comprehensive Plan?	Yes	Yes	Yes	Yes
Is the Plan up-to-date (less than 10 years old?)	No - 2004	No - 2005 But has 2010 Ag and Farmland Plan	No - 2007	Yes
Does the plan have a specific section addressing agriculture?	Yes	Yes. This is furthered in Ag and Farmland Plan	Yes	Yes
Does the plan include any maps of agricultural lands, important farmland soils, agricultural districts, etc.?	Now in NRI	Yes, in Ag Plan	Yes	Yes
Does the Plan explore the role of agriculture in the community? I.e., did a survey include questions about agriculture? Was there anything in workshops about it?	Yes	Yes	Yes	Yes
Does the Plan have a vision statement or goals that address agriculture in any way? Is there any visible demonstration of the value of agriculture to the community in the plan?	Yes	Yes	Yes	Yes
Does the plan recognize agriculture as an important resource in the town?	Yes	Yes	Yes	Yes

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Farm-Friendly Criteria	Gardiner	Marbletown	Ulster	Marlborough
Does the plan recognize or reference a local or County agriculture and farmland protection plan?	Yes - regional	In Ag Plan	Yes	Yes
Does the plan include any data on farms and farmland? Acreage? Income or occupations from farming or other ag-census data?	No. some now in NRI	Not in Comp Plan. Yes, in Ag Plan	Yes	Yes
Does the plan establish policies toward farmland and farming?	Yes	Broadly in Comp Plan, more specifically in Ag Plan	Yes	Yes
Does the plan identify the value of farmland and farms to the community in some way?	Yes	Yes	Yes	Yes
Does the Plan offer any recommended actions or strategies related to farming or farmland or ways to preserve or enhance farming?	Yes	Broadly in Comp Plan, more specifically in Ag Plan	Yes	Yes
Does the Plan establish a policy and/or future actions related to conservation subdivision or clustering, ag overlay districts or other methods?	Yes, but oriented to open space	Only in Ag Plan	Yes	Yes
Does the plan discuss NYS agricultural districts and ag assessments?	Yes	Only in Ag Plan	Yes	No
Does the Plan consider farmland an important resource, recognize prime or soils of statewide importance, and encourage easements or other protections of that land?	In NRI	Only in Ag Plan	Yes	Partially

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Farm-Friendly Criteria	Gardiner	Marbletown	Ulster	Marlborough
Is there a policy discussed for PDR, LDR or TDR?	Yes	Only in Ag Plan	Yes	Yes
Is agriculture a consideration of where growth does or does not take place?	Yes, very oriented to Smart Growth	Broadly in Comp Plan, more specifically in Ag Plan	Yes, a land use concept plan is included	Yes
Regulations (Subdivision)				
Does Subdivision Law address agriculture in any way?	No	Mentions Ag in purpose statements, asks Planning Board to consider impacts on ag, requires buffers with an open space design.	No	Defines Ag Data Statement and Farm Operations; no other mentions
Does subdivision application ask for any submissions related to agriculture?	No	No	No	No
Are conservation subdivisions allowed? Voluntarily? Mandatory? Does it address agriculture?	In Zoning	Yes, voluntarily. Ag uses is considered open space. Ag Buffers required.	No - not from Subdivision Law	No
Does subdivision include siting of non-farm development in a manner that preserves farm use?	No	Not unless it is an open space subdivision but does ask Planning Board to consider impacts to agriculture	No	No
Regulations (Zoning)				
Does the zoning regulation's purpose statement include a discussion of agriculture, or promote preserving agriculture specifically?	Yes	No	No	Yes

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Farm-Friendly Criteria	Gardiner	Marbletown	Ulster	Marlborough
Does zoning allow agriculture as a permitted use by right?	Yes	Yes, with some setback requirements. Use Table is not consistent with 200-38 (Agriculture) - could cause confusion	Yes (permitted by right and exempted from site plan review).	Yes
Does zoning prohibit agriculture in any district other than hamlet centers or commercial areas?	No	Use Table does prohibit; 200-38 allows in all districts	Yes, livestock agriculture and vineyards are allowed in R60 and RC/OM but not other places.	No
Are site plan reviews required in one or more districts for agriculture or ag-related uses?	Minor SPR for > 20,000 sf or > 35'	Use Table requires site plans or SUP, but 200-38 allows farm operations in all districts. Site Plan required for certain larger farm activities	Chapter 145 (Site Plan Review) exempts farm uses if they are greater than 5 acres and have > 50' setbacks. Small acreage farms would not be exempt and would require site plan.	No
Are special use permits for agriculture or ag-related uses required in one or more districts?	No	Use Table says yes, 200-38 for Farm Operations say no.	Horse stables and vineyards require special use permits and site plan review. Note that livestock farms are separate uses and treated differently from other ag.	No
Is residential, higher density or commercial growth allowed in core farm areas or where a NYS Ag District exists so that conflicts may arise?	Moderate (5 acre lot size)	Moderate (1, 2, 3 or 4 acre lot size depending on district)	Residential growth at higher densities (10,000 sf min lot size to 1.5 acres allowed in all areas where agriculture takes place)	Densities in R-AG-1 are high at 1 acre

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Farm-Friendly Criteria	Gardiner	Marbletown	Ulster	Marlborough
Does the zoning specifically establish a local agricultural zoning district designed for agriculture, ag overlay district, or special use district for agriculture?	No	No	No	No
Does the zoning allow farms to have more than one business or offer flexibility to accommodate the needs of agricultural businesses?	Not Mentioned	Not mentioned	Not mentioned	Not mentioned
Are buffer zones between farmland and residential uses required for new non-farm construction or subdivision?	Yes	Only in conservation subdivision	No	Yes, for some farms if they meet definitions form NYS 301
Are innovative development patterns specifically designed to preserve farmland encouraged, allowed, or mandated (conservation subdivision, clustering, TDR)?	Yes	Conservation Subdivision Voluntary	No	Cluster Development only in R1, not in R-Ag-1
Are off-site or on-site signs allowed to attract and direct people to farm stands and on-farm businesses?	On-farm signs exempt; 2 temp signs for on-farm roadside stand allowed; unclear about off-premise signs for farms	Signs are allowed for farms; unclear about off-premise signs for farms	Yes	Yes, allows for 4 off-site temporary signs
Are farm stands, farm retail markets, agritourism businesses, breweries, etc. allowed?	Yes, 800 sf or less	Yes	Farm stands and farmers markets defined and allowed as are vineyards. Others not specifically mentioned.	Yes, but different terminology is used (roadside stand defined, but farm and produce stands used in regs)

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Farm-Friendly Criteria	Gardiner	Marbletown	Ulster	Marlborough
Are farm processing facilities such as community kitchens, slaughterhouses, etc. allowed?	Probably. Definition for Ag includes processing, sale and storage	Not in Use Table, but yes, allowed from 200-38 (Agriculture) in NYS Ag District. Different rules for farms outside NYS Ag District	Not unless part of a farm operation. Not in use table	Some allowed in Industrial District with Special Use; if on farms, possibly in R-Ag-1 but it is not spelled out
Are farm stands limited to selling just products from that one farm or is that flexible?	Not indicated	No, limited to sale of produce grown on lot	Unclear. It uses term "primarily grown on premises"	Definition says majority must be grown on premises
Do farm stands and other on-farm retail need a site plan review or special use permit?	If greater than certain sizes- need minor SPR	Use Table says yes, 200-38 for Farm Operations say no for farms in NYS Ag District. Outside NYS Ag District roadstands need SUP	Unclear. Farm stands not in use table. They do require parking spots though.	No review needed in R-Ag-1
Does zoning allow for accessory uses such as greenhouses, barns, garages, equipment storage etc. permitted as of right?	Probably	Not as of right as per Use Table, but 200-38 says yes; Use Table says SUP for nurseries and greenhouses	Greenhouses are treated as separate use. Customary accessory uses for farms are allowed.	Probably as Agricultural uses, farm, or ag accessory use
Do application requirements for non-farm uses 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 ag district? What farming activities take place on or near the site? Whether prime farmland soils are present?	Just from Ag Data Statement	Not generally. In conservation subdivision, it does.	No	No
Do standards exist beyond SEQR that require the PB or ZBA to evaluate impacts of a project on agriculture?	Not specifically	No	No	No

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Farm-Friendly Criteria	Gardiner	Marbletown	Ulster	Marlborough
Do any design standards exist to direct building envelopes of non-farm development to areas on a parcel that would still allow farming to occur on remaining open spaces?	In open space developments; Subdivision law does not address	Solar farms can't be on prime soils; buffers required in Conservation Subd.	No	No
Does the zoning define agriculture, agricultural structure, farm worker housing, agritourism, agri-business and other agriculture-related terms?	Some. Agriculture is included, but not the others	Some. Farm operation definition is adequate. Agriculture definition is not adequate. Includes some other definitions.	Some. Agriculture and Farm Operation defined but are different. Livestock is a separate use.	Some are defined, but just the basics. Potential confusion between 'agriculture' and 'farm'; not all terms included
Are farm uses that are defined included in the Use Table?	Yes	No. Use Table and definitions are not consistent	Yes	Yes
Are farm-related definitions broad and flexible and not confined to a certain number of acres or income earned?	Yes - for Agriculture. Others not included. Lack of specificity could be issue.	Not definition for Agriculture. Farm operation is broad and more flexible. Horse stables limited to 10 acres, 10 horses, and \$10,000 income	Some are and some are not. Agriculture is different than farm operation.	There is confusion among terms. 'Farm' is defined to be > 10 acres so small farms are not included. Extra setbacks to protect farms would also not apply to small farms.
Are non-traditional or retail based farm businesses allowed in a district or ag zoned district? For example, can a farmer set up a brewery on-site and sell products on-site?	Probably because definition includes retail sales. Limited by size. May need minor site plan review for larger buildings	Use Table and 200-38 not consistent. Use Table very restrictive. 200-38 allows for all farm operations, activities related to farming, and occasional commercial/educational uses on farms. If using Farm Operation definition, then yes.	Probably because the definition of farm operation is broad, but otherwise it is not clearly stated. Unclear. Vineyards are a separate use. Unclear if breweries are treated as part of a farm operation.	Definitions confused and may not allow for retail sale on farm

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Farm-Friendly Criteria	Gardiner	Marbletown	Ulster	Marlborough
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?	Yes	Only mentioned in conservation subdivision section	No	No
Is ag disclosure statement on plans or plats required when development takes place in a NY certified ag district or otherwise recognize this?	No	No	No	No
Does the regulation define and allow for farm worker housing? Are mobile homes allowed as farm worker housing?	Doesn't define but does allow for multi-family use for farm housing. Use in mobile homes not addressed	No definition, but allowed for transient labor for active ag as permitted use in A1 and A2	No, not mentioned or defined	Allows for farmworker housing, but not defined
Are silos and other farm structures exempt from height requirements?	Yes	Barns and Silos can exceed height but only if additional setbacks are provided for	No, not exempt	Yes, but only if additional setbacks are also provided for
Does Town have regulations for solar and wind?	Yes, for solar	Yes, for solar	No	Yes, for solar
Does solar regulations address development on farmed parcels or address development on farmland soils?	No	Yes, does not allow solar farms on prime soils	No	No
Are personal windmills and solar panels allowed for farm use? With permits or permitted as of right?	Not specifically mentioned. Probably rooftop. No mention of agrivoltaics or solar for farm use per NYS	Not specifically mentioned. Probably rooftop. No mention of agrivoltaics or solar for farm use per NYS	No	Not specifically mentioned. No mention of agrivoltaics or solar for farm uses per NYS

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Farm-Friendly Criteria	Gardiner	Marbletown	Ulster	Marlborough
<p>Does zoning establish any rules for manure storage or spreading or other water quality related rules on farms?</p>	<p>Only as part of a non-farm residential use. Some aspects of farming may be regulated in 150' stream buffer</p>	<p>Requires 100' setback for unenclosed manure storage in NYS Ag District. No unenclosed storage allowed outside NYS Ag District.</p>	<p>No rules</p>	<p>No rules</p>

Appendix 8. Climate Adaptation Resources

USDA has developed a menu of adaptation strategies that could be put to work in Ulster County. The following chart²² offers a framework for understanding opportunities in Ulster to address climate change:

Menu of Adaptation Strategies and Approaches	
Strategy 1:	Sustain fundamental functions of soil and water.
Approach 1.1:	Maintain and improve soil health.
Approach 1.2:	Protect water quality.
Approach 1.3:	Match practices to water supply and demand.
Strategy 2:	Reduce existing stressors of crops and livestock.
Approach 2.1:	Reduce the impacts of pests and pathogens on crops.
Approach 2.2:	Reduce competition from weedy and invasive species.
Approach 2.3:	Maintain livestock health and performance.
Strategy 3:	Reduce risks from warmer and drier conditions.
Approach 3.1:	Adjust the timing or location of on-farm activities.
Approach 3.2:	Manage crops to cope with warmer and drier conditions.
Approach 3.3:	Manage livestock to cope with warmer and drier conditions.
Strategy 4:	Reduce the risk and long-term impacts of extreme weather.
Approach 4.1:	Reduce peak flow, runoff velocity, and soil erosion.
Approach 4.2:	Reduce severity or extent of water-saturated soil and flood damage.
Approach 4.3:	Reduce severity or extent of wind damage to soils and crops.
Strategy 5:	Manage farms and fields as part of a larger landscape.
Approach 5.1:	Maintain or restore natural ecosystems.
Approach 5.2:	Promote biological diversity across the landscape.
Approach 5.3:	Enhance landscape connectivity.
Strategy 6:	Alter management to accommodate expected future conditions.
Approach 6.1:	Diversify crop or livestock species, varieties or breeds, or products.
Approach 6.2:	Diversify existing systems with new combinations of varieties or breeds.
Approach 6.3:	Switch to commodities expected to be better suited to future conditions.
Strategy 7:	Alter agricultural systems or lands to new climate conditions.
Approach 7.1:	Minimize potential impacts following disturbance.
Approach 7.2:	Realign severely altered systems toward future conditions.

²² From https://www.climatehubs.usda.gov/sites/default/files/adaptation_resources_workbook_ne_mw.pdf

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Menu of Adaptation Strategies and Approaches	
Approach 7.3:	Alter lands in agricultural production.
Strategy 8:	Alter infrastructure to match new and expected conditions.
Approach 8.1:	Expand or improve water systems to match water demand and supply.
Approach 8.2:	Use structures to increase environmental control for plant crops.
Approach 8.3:	Improve or develop structures to reduce animal heat stress.
Approach 8.4:	Match infrastructure and equipment to new and expected conditions.

The following agencies and programs are designed to help farmers become more climate-resilient:

- There are numerous programs with technical and financial assistance supporting climate resiliency on farms.
- USDA Programs <https://www.farmers.gov/conservation/climate-smart>
 - USDA Natural Resources Conservation Service (NRCS): Climate-Smart Agriculture and Forestry (CSAF) Mitigation Activities list for FY 2024: [Climate-Smart Agriculture and Forestry Mitigation Activity List \(usda.gov\)](#)
 - Agricultural Conservation Easements Program (ACEP) - Helps landowners and other entities protect, restore, and enhance wetlands, grasslands, and working farms and ranches through conservation easements. ACEP is available through USDA’s NRCS.
 - Conservation Stewardship Program (CSP) - Offers technical and financial assistance to help agricultural and forest producers take existing conservation efforts to the next level. Through this program, NRCS provides opportunities for producers to apply conservation practices across their entire operation through a five-year contract.
 - Conservation Reserve Program (CRP) -Provides rental payments and cost-share assistance for agricultural producers to put environmentally sensitive land into 10-15 year contracts to plant resource-conserving plant species that control soil erosion, improve water quality, develop wildlife habitat, and boost carbon sequestration. FSA updated CRP in 2021 to include a Climate-Smart Practice Incentive as well as invested in monitoring, assessment and evaluation of the program's climate benefits.
 - Environmental Quality Incentives Program (EQIP) -Provides financial and one-on-one technical assistance to implement conservation practices to meet your specific conservation and production goals. EQIP supports climate-smart conservation practices.
 - Conservation Innovation Grants (CIG) - Seeks to drive public and private sector innovation in natural resource conservation.

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- Regional Conservation Partnership Program (RCPP) - Conservation partners work in collaboration with NRCS to help farmers, ranchers, and forest landowners implement systems that conserve water and soil resources, improve the health of wildlife habitats, and increase climate resilience.
- Farm Loans to finance climate-smart practices or equipment - The Farm Service Agency (FSA) offers loans to help farmers and ranchers start, expand, or maintain family agricultural operations. These can be used to finance the implementation of climate-smart agricultural practices.
- New York State Department of Agriculture and Markets - <https://agriculture.ny.gov/soil-and-water/climate-resilient-farming>
 - New York's Climate Act <https://nofany.org/advocacy/climate/>
 - Climate Resilient Farming Program (CRF) - Offers grants awarded through county Soil and Water Conservation Districts in three categories:
 - Agricultural waste storage
 - On-farm water management
 - Soil health systems
 - Cornell Climate Smart Farming - The Cornell University Climate Smart Farming website offers resources, decision tools, news and technical education and assistance to help farmers manage climate risk. This information can also be accessed through the network of Cornell Cooperative Extension county and regional offices.
<http://climatesmartfarming.org/>
 - The New York State Climate Impacts Assessment was released in February 2024. Chapter 3 is devoted to Agriculture. There is extensive coverage of farm climate impacts and adaptation strategies in the document.
<https://nysclimateimpacts.org/wp-content/uploads/2024/02/Assessment-ch3-agriculture-01-31-24.pdf>
 - New York Climate Resilience Grant Program - The Climate Resilience Grant Program (CRGP) through The Nature Conservancy offers grants of up to \$50,000 to non-profit 501(c)(3) conservation and community organizations, municipalities, tribal entities and local and state agencies for projects that contribute to a world where people and nature can thrive. The goal of the program is to support partners in protecting the lands and waters critical for adapting to climate change.

Appendix 9. Supportive Infrastructure - Existing Educational Programs and Resources

High School Programs

- Rondout Valley High School Future Farmers of America (FFA) program
- Ulster BOCES Career and Technical Center
- Kingston Public Schools FFA program

Cornell Cooperative Extension (ulster.cce.cornell.edu/) puts knowledge to work in pursuit of economic vitality, ecological sustainability, and social well-being. It brings local experience and research-based solutions together, helping New York State families and communities to thrive. Cornell Cooperative Extension Ulster County offers a diversity of agriculture-related programs, including the following:

4-H (youth program) (4-h.org/)

4-H agriculture programs equip young people with the skills they need to succeed in life, and are available through local clubs, schools and grant-funded programs.

Agriculture Marketing

Research-based strategies and tools for effective marketing, branding, and distribution of agricultural products to enhance farm profitability and market reach.

Agritourism

Promotes farm-based tourism by offering resources and support for developing agritourism ventures that connect consumers with local agriculture.

Beginning Farmers and New Landowners

The program covers a variety of topics with opportunities to connect with specialists and technical support providers that help new and aspiring farmers get started.

Disaster Preparedness for Agricultural Operations

Evidence-based information and education about disaster readiness and response, including specialized expertise in agriculture and natural resources management.

Farm to School (www.farmtoschool.org/)

The program enriches the connection communities have with fresh, healthy food and local food producers by changing food purchasing and education practices at schools and early care and education settings.

Field Crops/Agronomy

Research-based field crop production management recommendations and resources for grain, forage, and oil crops.

Hemp/CBD Production (hemp.cals.cornell.edu/)

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Provides guidance on the cultivation and processing of hemp and CBD products.

Integrated Pest Management (IPM) (<https://cals.cornell.edu/new-york-state-integrated-pest-management>)

Develops sustainable ways to manage pests and helps people use methods that minimize environmental, health, and economic risks.

Livestock

Resources and education are available for farmers on raising livestock, forage crops, and pasture management.

Master Gardener Program

Programs, education, resources, diagnostic services, and identification services for the home gardener.

Natural Resources and Climate Smart Farming

Educational tools and guidance are available for farms related to natural resource conservation, regenerative agriculture practices, climate change mitigation, adaptation strategies, soil health, biodiversity, and improving ecosystem services to foster resilience and sustainability in agricultural systems.

Ulster County Planning Department (<https://ulstercountyny.gov/planning/agriculture>): In addition to services and programs such as GIS tools and data, the County Planning Department encourages the use of land for farming through its Agricultural Districts Review program, the County Agricultural and Farmland Protection Board, development of various plans including this county-wide agricultural and farmland protection plan. The County also provides a variety of documents and publications to aid in land use, community design, economic development, and other planning guides and tools.

Ulster County Fair (<https://ulstercountyfair.com/>): Started in 1868, the Ulster County Fair is owned and run by the Ulster Agricultural Society. The purpose of the organization is to “promote, encourage, and develop an interest in agriculture and horticulture, the improvement of breeds of animals, friendly relations between, and work with, the various agencies of the County for a better understanding, as well as improvement and education of the general public in agriculture. The Ulster County Fair shall be managed and promoted to inform the public in the fields of agriculture, horticulture, and animal husbandry.

The organization shall strive to educate and encourage the youth of the community to be active in agriculture, to improve agriculture and animal husbandry to disseminate information to the public with respect to the organization and its member organizations, to keep the agricultural community informed, and to promote and manage the Ulster County Fair.”

Ulster BOCES Animal Science (<https://www.ulsterboces.org/about-us/news-communications/news-room/details/~board/all-news/post/ulster-boces-animal-science-program-expands-agricultural-education>)

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SUNY New Paltz Programs (<https://www.suny.edu/suny-news/press-releases/9-23/9-7-23/ag-tech-summit.html>): An agriculture and technology grant, made possible by the \$75 million Transformation Fund allocated to SUNY by Governor Hochul, has been awarded to SUNY New Paltz. The funding will be utilized for soil regeneration for sustainable agriculture practices programming at the college.

SUNY Ulster Programs (<https://www.sunyulster.edu/>): SUNY Ulster offers a variety of programs and academic degrees and certificates related to agriculture. SUNY Ulster offers STEM programs that include agriculture.

Glynwood Center for Regional Food and Farming (<https://www.glynwood.org/>): The Glynwood Center provides a variety of educational and training programs to train and support future farmers, educate stakeholders to advance regional food, building producer coalitions, and enhancing access to local food. Programs include:

- Apprentice Program
- Hudson Valley Farm Business Incubator
- Mid-Hudson Collaborative Regional Alliance for Farming Training (CRAFT)
- Farmer Training Workshops
- Regenerative Farm Resilience Guide
- Cider Project
- CSA is a SNAP
- Food Sovereignty Fund
- Grains and Staples Project
- Hudson Valley CSA Coalition
- Kitchen Cultivars

Hudson Valley AgriBusiness Development Corporation (HVADC) (<https://www.hvadc.org/>): HVADC assists local agribusinesses through a variety of programs, funding and support including business technical assistance, loans and grants, marketing and tourism, and the Feed HV program, a regional food rescue and harvesting network dedicated to meeting the needs of neighbors while mitigating the impacts of food waste. It promotes agricultural entrepreneurship, supports sustainability and enhances economic growth in the Hudson Valley region. Some of its past programs include Local Lamb Lessons, the Eastern Broccoli Project, and the Food System Survey, and the organization has worked with many local farms and agribusinesses to assist them with grants, technical assistance, incubators (the HVADC Incubator Without Walls program), brand development, regional product launches, business planning, and licensing.

Ulster County Farm Bureau (<https://nyfb.org/about/county-farm-bureau/ulster-county>): Farm Bureau is an organization that supports and advocates for farms and agribusinesses. It works to support farms through policy issues such as taxation, conservation and food availability.

Rondout Valley Growers Association (<https://rondoutvalleygrowers.org/>): RVG at George Washington Elementary School – farm-to-school program. The biggest push for RVGA these days is cultivating relationships with schools. This past winter, for the first time, it hired a part-time coordinator to run and expand its Farm-to-School programs. There are now “share table” programs

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in Highland, Ellenville and Kingston (an ongoing school initiative aimed to educate children about farming while encouraging them to explore the tastes and wonders of locally grown food.)

Hudson Valley Farm Hub (<https://hvfarmhub.org/ag-education/>) is a nonprofit agricultural center. It has a 1,600-acre farm operation and offers a suite of programs and practices to foster equitable and resilient food systems. The Farm Hub does this through ag education and training, agronomic research, applied farmscape ecology, programs in food access and language justice, and seed growing. It has an agricultural education and training program that works to “improve the capacity of farmers and agricultural workers to plan and sustain their careers in agriculture.” Programs are focused on farm business planning, farm equipment/safety programming, organic vegetable and grain production, and professional development. The Farm Hub provides workshops, apprenticeships and leadership development for English and Spanish speakers.

Kingston YMCA Farm Project (<https://www.kingstonymcafarmproject.org/>): This program is “an urban, educational farm located at the YMCA in Midtown Kingston, New York. They use organic growing methods to grow food for our immediate community. They sell hyper-local fruits and vegetables at farm stands in the lobby of the Y. They also work with preschoolers through high-school students, bringing young people to the farm to get their hands dirty as they learn, work, explore and play on the farm. The youth development program offers 14-18 year olds the opportunity to work on the YMCA farm, help run farm stands and gain valuable employment experience while earning an hourly wage.” The Farm is located behind the YMCA, across from River Radiology, near the intersection of Susan and Summer Streets.

Hudson Valley Research Lab (<https://www.farmhv.org/>): This is a partnership between local growers and Cornell Agritech as part of the New York State Agricultural Experiment Station. Researchers here work with commercial fruit and vegetable growers along with other agricultural producers to support the local food system and to protect the agricultural heritage of the Hudson Valley and Eastern New York. The Lab provides internships and research opportunities related to entomology (insect pests), plant pathology, and horticulture and works with area farms.

Ulster County Soil and Water Conservation District (<https://ulster-county-swcd.square.site/>): Local Soil and Water Conservation Districts (SWCD) provides ongoing programs and services to conserve, enhance, and protect soil and water resources. They provide technical assistance and programs to residents, landowners, farmers, and local government in programs such as the no-till drill rental program, cover crop program, cover crop mini-grants, tree and shrub sales, soil health field day, ag value assessments, mapping assistance, stormwater and erosion and sediment control assistance, the Agricultural Environmental Management program with USDA (AEM), conservation project partnerships with USDA, cost-share programs for agricultural best management practices, climate resilient farming assistance, and streambank stabilization and more.

Kingston Land Trust’s Land in Black Hands (<https://kingstonlandtrust.org/land-in-black-hands>): This is a program of the Kingston Land Trust dedicated to the collective exploration of ecological land stewardship by the Black, Indigenous and People of Color (BIPOC) community through education, long term land access, public engagement and forthcoming projects at the initiative's land base in the City of Kingston.

Appendix 10. Supportive Infrastructure - Agricultural Resources Inventory

The following charts identify the various agencies and organizations that support agriculture and the type of support or resource that they offer. The charts divide these organizations according to whether they are county, state, regional, or national. A more detailed listing of these organizations follows these tables , summarizing their programs and websites/contact information.

Ulster County/Mid-Hudson Region						
Agency or Organization	Funding	Technical Assistance	Training & Education	Community Outreach or Food Outreach	Advocacy	Other
Catskill Mountainkeeper						
Cornell Cooperative Extension, Ulster County						
Glynwood Center - Hudson Valley Farm Business Incubator						
GrowNYC Farmers Assistance						
Heroic Food Farm						
Hudson Valley AgriBusiness Development Corporation (HVADC)						
Hudson Valley CSA Coalition						
Hudson Valley Farm Hub						
Hudson Valley Research Lab						

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Ulster County/Mid-Hudson Region						
Agency or Organization	Funding	Technical Assistance	Training & Education	Community Outreach or Food Outreach	Advocacy	Other
Kingston Land Trust						
National Young Farmers Coalition - Hudson Valley						
Open Space Institute - Hudson Valley						
Rondout-Esopus Land Conservancy						
Rondout Valley Growers Association						
Scenic Hudson						
Seasoned Gives						
Ulster County Farm Bureau						
Ulster County Soil and Water Conservation District						
Wallkill Valley Land Trust						
Watershed Agricultural Council						
Woodstock Land Conservancy						

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New York State						
Agency or Organization	Funding	Technical Assistance	Training & Education	Community Outreach or Food Outreach	Advocacy	Other
American Farmland Trust, New York Office						
Beginning Farmers Grant Program						
Center for Agricultural Development and Entrepreneurship						
Farmers Market Federation of New York						
Farm to Institution New York State						
New York Ag Connection						
New York Farm Net						
New York Farm Bureau						
New York Farm Viability Institute						
New York Marketmaker						
NYS Department of Agriculture and Markets						
NYSERDA - New York State Energy Research and Development Authority						

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New York State						
Agency or Organization	Funding	Technical Assistance	Training & Education	Community Outreach or Food Outreach	Advocacy	Other
New York State Future Farmers of America						
NY Food for NY Families						
NY Apples						
Small Scale Food Processors Association of New York						
Socially and Economically Disadvantaged Farmers Grant Program						

Northeastern U.S. Region						
Agency or Organization	Funding	Technical Assistance	Training & Education	Community Outreach or Food Outreach	Advocacy	Other
Black Farmer Fund						
Farm Credit East						
New England Small Farm Institute						
Northeast Farmers of Color Land Trust						
Northeast Organic Farming Association						

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Northeastern U.S. Region						
Agency or Organization	Funding	Technical Assistance	Training & Education	Community Outreach or Food Outreach	Advocacy	Other
Northeast Sustainable Agriculture Research and Education						
Northeast Sustainable Agriculture Working Group						
Regional Food Business Centers Programs (Northeast)						

Federal						
Agency or Organization	Funding	Technical Assistance	Training & Education	Community Outreach or Food Outreach	Advocacy	Other
Dairy Business Innovation Initiatives						
Partnerships for Climate-Smart Commodities						
USDA Agricultural Marketing Service						
USDA Farm Service Agency						
USDA Natural Resources Conservation Service						

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Federal						
Agency or Organization	Funding	Technical Assistance	Training & Education	Community Outreach or Food Outreach	Advocacy	Other
USDA - How to Start a Farm						
USDA Rural Development - New York Office						

Other						
Agency or Organization	Funding	Technical Assistance	Training & Education	Community Outreach or Food Outreach	Advocacy	Other
Agricultural Marketing Resource Center						
Cornell Small Farms Program						
Dirt Capital Partners						
Equity Trust						
Farm Aid Resource Network						
Farmer Veteran Coalition						
Future Farmers of America						
National Farm to School Network						
National Good Agricultural Practices Program (Cornell)						

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Other						
Agency or Organization	Funding	Technical Assistance	Training & Education	Community Outreach or Food Outreach	Advocacy	Other
National Sustainable Agriculture Information Service						
Niche Meat Processor Assistance Network						
Ohio Direct Marketing Food & Agriculture						
Rodale Institute Your Two Cents Fund						
U.S. Farmstay Association						
WWOOF (World Wide Opportunities on Organic Farms)						

Ulster County/Mid-Hudson Region

- **Catskill Mountainkeeper** - <https://www.catskillmountainkeeper.org/>
 - Grassroots advocacy organization dedicated to promoting sustainable growth and protecting the natural resources in the Catskill region.
 - Catskill Food Initiative: Includes the Catskill Edible Gardens Project, increased access to healthy local foods
 - Agriculture Loan Fund for value-added production
- **Cornell Cooperative Extension, Ulster County** - <https://ulster.cce.cornell.edu/agriculture>
 - Outreach and education in agriculture and natural resource management; provides numerous educational programs for farmers and landowners.
 - **Supports two different commissions** within Ulster County, which are:
 - **Healthy Ulster Council:** The Healthy Ulster Council, an Ulster County Department of Health community coalition, is facilitated with assistance from Cornell Cooperative Extension Ulster County
 - **Hudson Estuary Watershed Resiliency Program (HEWRP):** HEWRP is a regional CCE program (Columbia-Greene, Dutchess and Ulster Counties) focused on climate resiliency. CCE Ulster is working with municipalities on Climate Smart Resiliency Planning Tools, Flood Preparedness Guides and a Water Infrastructure Inventory. (funded by NYSDEC, Cornell WRI through CCEDC).
 - While not exactly grants, these provide key mechanisms for farmers to participate in local government and give their perspective.
 - **Farm to School Program:** The Harvest NY Regional Farm to School Coordinator Program provides comprehensive support to Farm to School stakeholders, including school districts, farmers, distributors, manufacturers, processors, and food hubs. The primary goal of this program is to increase the volume and variety of local farm products purchased by schools for use in child nutrition programs. To achieve this goal, Harvest NY will:
 - Provide direct support to supply chain partners.
 - Provide statewide support via resource development, training, and technical assistance to supply chain partners.
 - Strengthen campus-to-community connections by identifying and developing opportunities for applied Farm to School research.
 - Farmers can inquire within the Farm to School program about becoming a supplier, which serves the local community and can earn them money.
- **Glynwood Center - Hudson Valley Farm Business Incubator** - <https://www.glynwood.org/what-we-do/farm-training/farm-business-incubator.html>
 - Provides the tools and resources aspiring agricultural entrepreneurs need to develop and manage viable farm enterprises; offers business planning, financial management, farm mentorship and onsite farm visits, social sustainability, training and support and marketing, legal advising, and land access/tenure support.
 - BIPOC, LGBTQIA2S+, women and/or gender non-binary farmers and those who identify as Immigrant/New American are particularly encouraged to apply, and will be given priority consideration in applications
- **GrowNYC Farmers Assistance** - <https://www.grownyc.org/farmerassistance/nfd>

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- Helps connect consumers, farmers, and wholesalers with each other in different farmers markets and other forms.
- Provides technical assistance to farmers and other producers.
- Open to field trips and education for grade schools, senior centers, and community groups.
- Operates beginning farmers program, which helps newer farmers find resources and get experience in order to establish their own farms serving the NYC Region.
- **Heroic Food Farm** - <http://heroicfood.org>
 - 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 Agribusiness Development Corporation** - <http://www.hvadc.org>
 - **HVADC Agriculture Loan Fund:** HVADC has been named as a designated lender to help administer a recently established \$10 million fund from New York State that will be available to assist local agribusinesses have easier access to capital.
 - **New York State Grown & Certified:** To assist farmers achieve NYS Grown & Certified (G&C) status, the Hudson Mohawk Resource Conservation and Development Council, Inc. (HMRC&D) and the Hudson Valley AgriBusiness Development Corporation (HVADC) are partnering to administer a grant program in the Capital District Region.
 - **Participates in FoodHV,** which is a regional food rescue and harvesting network dedicated to meeting the needs of neighbors while mitigating the impacts of food waste.
 - **Hudson Valley Bounty:** a project of HVADC designed to promote and support networking connections between local agricultural producers and culinary businesses, while educating the community about the preservation of local farms and the use of local and regional sustainable food products.
- **Hudson Valley CSA Coalition** - <https://www.hudsonvalleycsa.org/>
 - Network of over 120 farms
 - Helps consumers find CSA farms near them
 - Accessible to people on SNAP benefits
 - Provision of resource sharing, training, community communication, and educational resources.
- **Hudson Valley Farm Hub** - <https://hvfarmhub.org/>
 - Nonprofit agricultural center dedicated to resiliency in the regional food system.
 - Provides and supports Agricultural education & training, Applied farmscape ecology, food access, language justice, agronomic research, and seed growing.
- **Hudson Valley Research Lab** - <https://www.farmhv.org/>
 - Research on pest management, diseases that affect plants, etc.
 - The research lab can run case studies on individual farms and track outcomes to provide more information to both farmers and the scientific community.
 - Develop new varieties of different crops for farmers to try and grow.
 - Help with the implementation of sustainable farming practices.
- **Kingston Land Trust** - <https://kingstonlandtrust.org/>
 - Helps preserve farmland through conservation easements.
 - Comida y tierra - Conversations in Spanish that support local restaurants and farms
 - Land in Black Hands - deals with public engagement, education, and different projects in order to encourage more Black, Indigenous, and People of Color (BIPOC) to become farmers in the city of Kingston.

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- Land matching portal - service that allows people to arrange shared use of public and private land
- **National Young Farmers Coalition - Hudson Valley** - <https://www.hvyoungfarmers.org/>
 - Social and business network that encourages cooperation and communication among farmers.
 - Joining the organization is required to gain access, but it costs \$1 to do so.
- **Open Space Institute - Hudson Valley** - <https://www.openspaceinstitute.org/places/udson-river-valley>
 - Aid with local infrastructure projects, which can benefit farmers
 - Land conservancy for Hudson Valley Farmers
- **Rondout-Esopus Land Conservancy** - <https://www.relandconservancy.org/>
 - Land trust dedicated to protecting land through easements, including farmland.
 - Helps with maintaining and defending easements legally.
 - Helps educate the public about land conservation.
- **Rondout Valley Growers Association** - <https://rondoutvalleygrowers.org/about-us/>
 - Nonprofit with the goal of strengthening communities and local economies through the support of agriculture.
 - Includes the following four core areas:
 - Farm-to-Pantry
 - Farm-to-School
 - Local Farmer Advocacy
 - Farm-to-Community
- **Scenic Hudson** - <https://www.scenichudson.org/our-work/conservation/farms/>
 - Land conservancy that since 1992 has conserved over 18,000 acres from 125 family farms
 - Supports regenerative agriculture
- **Seasoned Gives** - <https://www.seasonedgives.org/youth-entrepreneurship-through-farming-and-agriculture>
 - Program that provides education to younger people on not only how to farm but also how to better cultivate their farm as a business. Both farming and entrepreneurial skills are taught.
- **Ulster County Farm Bureau** - <https://nyfb.org/about/county-farm-bureau/ulster-county>
 - Involved with farming advocacy at the political level within Ulster County and within New York State at large. Helps with addressing grievances farmer members have, does lobbying to local representatives.
 - Members of UCFB can receive workers' compensation.
 - Young Farmer & Rancher Program - leadership & networking program for people aged 18-35
 - Legal referral system for members to take advantage of, as well as an educational program.
- **Ulster County Soil and Water Conservation District** - campsite.bio/ucswcd
 - Runs a Crop Cover Reimbursement Program, which covers the cost of planting cover crops in individual amounts up to \$5,000. This was in 2023, so no idea if it's running this year.
 - Provides a lease agreement for a no till equipment for cheap for farmers who might otherwise not be able to afford it.
- **Walkkill Valley Land Trust** - <https://walkkillvalleylt.org/farms/>
 - Works with landowners interested in taking part in conservation easements.
 - 42 active permanent conservation easements in Ulster County, 19 of which are active agricultural land.
- **Watershed Agricultural Council** - <http://www.nycwatershed.org>

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- Works with farm and forest landowners in the New York City Watershed region to protect water quality through land conservation, while supporting the economic viability of agriculture and forestry.
- Whole Farm Planning: holistic approach to farm management used to identify and prioritize environmental issues on a farm without compromising the farm business.
- Farm to Market Program: farm-business improvement grants, educational scholarships and other opportunities that provide farmers a chance to learn, enhance and bolster their production and marketing efforts.
- Farm to Market Conference: trade show connecting farmers with NYC buyers.
- Pure Catskills: a buy local branding campaign supporting the local food community and working landscapes in the Catskills region; participation is open to any farm-related business within any of the six counties that WAC represents (i.e., does not have to be located in the NYC watershed) - see <http://www.purecatskills.com>
- **Woodstock Land Conservancy** - <https://www.woodstocklandconservancy.org/who-we-are/mission/>
 - Land conservancy based out of the area of Woodstock, NY with room to have farmland conservation easements.
 - Performs advocacy for preserving land, including farmland.

New York State

- **American Farmland Trust, New York Office** - <https://farmland.org/about/how-we-work/new-york-regional-office/>
 - Advocacy for farmers' issues and other matters within New York State
 - Helps new farmers find land and retiring farmers keep their land in agriculture
 - Farm-to-Institution program
 - Demonstration farm network
 - Promotion of involving more female voices in agriculture and female farmers at large
- **Beginning Farmers Grant Program - \$1 million**
 - NYS program to be administered by the New York Farm Viability Institute
 - Grants awarded on a competitive basis to farmers who have not operated a farm for more than ten years, and who will operate a farm in New York State; will range from \$5,000 to \$250,000
- **CADE, The Center for Agricultural Development and Entrepreneurship** - <http://www.cadefarms.org>
 - Ulster County is home to 78 clients, partners, and funders
 - Helps with access to farmland and capital, business development and marketing, regenerative practices, and connecting with peers and mentors.
- **Farm to Institution New York State (FINYS)** - <https://finys.org/about>
 - Trains and supports institutions in expanding local food purchases
 - Advocacy for public institutions to use their money to buy New York-grown food.
 - Professional development opportunities for New York schools to develop and refine their Farm to School programs and to help bring in more New York grown food.

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- Farmer Readiness Scan - tool for farmers provided by FINYS in order to help farmers assess existing operations, identify challenges and barriers to institutional procurement, and receive personalized feedback about available resources and next steps toward successfully selling to NY State institutions.
- **Farmers Market Federation of New York** - <http://www.nyfarmersmarket.com>
 - Gives guidance on innumerable topics such as safety recommendations, local regulations for farmers markets, handouts for frequently asked questions.
 - Provides tools and toolkits on the different regulations of farmers markets, pre-planning checklists, succession plans, and more.
 - Provides further reading on regulations, how to grow a farmer's market, market assessment, and how to overall market to consumers.
 - Provides handouts for customers on how to shop at a farmer's market, why one should shop at a farmers' market, and the storage of goods from farmer's markets.
 - Also provides tons of programs to get involved with.
- **New York Ag Connection** - <http://www.newyorkagconnection.com>
 - Provides latest updates on the prices of different agricultural products.
 - Provides relevant news regarding agricultural markets.
 - Provides a directory of different farm-related businesses for farmers, with everything from veterinary services to financial services to farm equipment and everything in between.
 - Provides links and addresses to upcoming auctions of farm animals, equipment, and estates.
- **New York FarmNet** - <http://www.nyfarmnet.org>
 - Helps with financial analysis, business planning, farming within a family (conflict management, etc.), personal well-being, connection with agribusiness professionals, retirement & estate planning, and business transfers.
 - FarmNet is a free service to use but may refer a farmer to a different agency that may charge money if FarmNet is unable to assist.
- **New York Farm Bureau** – <http://www.nyfb.org>
 - Provides Workers' Compensation Insurance for members engaged in eligible agriculture-related businesses.
 - Agricultural education wing helps educate the public about agriculture.
 - Advocacy in the political arena and provision of legal resources to members.
 - Helps agricultural producers and enthusiasts between 18-35 plan their futures, join in social activities, and develop leadership skills.
- **New York Farm Viability Institute** – <http://www.nyfvi.org>
 - Nonprofit grantmaking organization running competitive grant programs in order to fund agricultural research and education projects.
 - Grant programs:
 - FVI - awards ~\$1.5 million each year through competitive process
 - Dairy Program - small program providing support to individual farms through Dairy Profit Teams and to groups of farms that work with a Topic Specific Team.
 - USDA Specialty Crop Block Grant - Administration of a competitive program on behalf of NYS Dept. of Agriculture and Markets
 - Connects farmers with other various grants and resources.
- **New York Marketmaker** - <http://ny.foodmarketmaker.com>

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- An interactive platform that seeks to foster business relationships between producers and consumers of food industry products and services.
- **NYS Department of Agriculture and Markets** - <http://www.agriculture.ny.gov>
 - 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.
 - Additional funding opportunities are announced periodically.
- **NYSERDA - New York State Energy Research and Development Authority** - <http://www.nyserda.org>
 - 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 - \$5 Million grant to demonstration projects that co-locate agriculture and solar.
- **NY Food for NY Families** - <https://agriculture.ny.gov/new-york-food-new-york-families>
 - NYS program funded by the USDA Local Food Purchase Assistance Cooperative Agreement Program
 - In 2022, NYS announced 2 competitive grant opportunities through the program... now closed, but a second opportunity will be announced in the future
 - Goals are to:
 - Support local and traditionally disadvantaged farmers/producers by building and expanding economic opportunities and creating new marketing channels
 - Establish and broaden partnerships between New York farmers/producers and the food distribution community and local food networks to ensure distribution of fresh nutritious foods in rural, remote, and/or underserved areas
 - Improve food access for underserved communities by tailoring distribution to unique local challenges.
- **New York State Future Farmers of America** - <https://www.nysffa.org/>
 - Provision of education to youth of all ages who are interested in farming.
 - Available to all students in all New York schools.
- **Small Scale Food Processors Association of New York** – <http://www.nyssfpa.com>
 - Provides access to new regulatory information, mentors for startups, member information, and technical information and assistance.
 - Provides outreach on Instagram and Facebook
- **Socially and Economically Disadvantaged Farmers Grant Program - \$4 million**
 - NYS program to be administered by The Northeast Farmers of Color Land Trust (NEFOC) and its fiscal sponsor, Resist Inc.
 - Grants awarded on a competitive basis to eligible farmers, will range from \$5,000 to \$250,000

Northeast Region

- **Black Farmer Fund** - <https://blackfarmerfund.org/>
 - Provision of skillshares and webinars available.
 - Grants and scholarships available.
 - Provides business, legal, and community resources to those in need.
 - Educational resources on the history of black farming, archive about the history of black farming.
- **Farm Credit East** – <http://www.farmcrediteast.com>
 - “The # 1 financial services cooperative for the agricultural industry” in the northeastern U.S.
- **New England Small Farm Institute** - <http://www.smallfarm.org>
 - Promotes small farm development by providing information and training for aspiring, beginning and transitioning farmers.
- **Northeast Farmers of Color Land Trust** - <https://www.nefoclandtrust.org>
 - Provides subsidies for education, educational material, and ways to connect with other farmers for BIPOC individuals.
 - Promotion of ancestral land practices for BIPOC individuals.
 - Also aid with shared land stewardship.
- **Northeast Organic Farming Association** - <http://www.nofa.org/index.php>
 - Northeast/Mid-Atlantic Transition to Organic Partnership Program - USDA initiative investing \$100 million over 5 years to provide education, technical assistance, and support to help producers transition to organic - https://nofa.org/wp-content/uploads/2023/11/2023_TOPP_Northeast_Fact_Sheet.pdf
 - This includes farmer-to-farmer mentoring, technical assistance and training, community building, and workforce development and training.
 - Includes CT, RI, MA, NY, VT, NH, ME, NJ, PA, DE, MD, WV, and VA.
 - Also has a soil carbon restoration program.
 - Does political advocacy and publishes different works.
- **Northeast Sustainable Agriculture Research and Education** – <http://www.nesare.org>
 - Offers grants for funding relevant agricultural research projects.
- **Northeast Sustainable Agriculture Working Group** - <https://nesavg.org/>
 - NESAWG is a network of over 500 participating organizations and thousands of individuals carrying out farm and food systems endeavors in 12 states and Washington D.C.
- **Regional Food Business Centers Program (Northeast)**
 - Provides coordination, technical assistance, and capacity building.
 - Helps with overcoming barriers to market access and provides direct business technical assistance to small and mid-sized food and farm businesses.
 - Awards up to \$100,000 to support projects focused on regional needs.
 - Northeast specifically has \$30 million for direct funding into two grant streams, mostly from partners Buffalo Go Green and Cornell University’s Center for Regional Economic Advancement (CREA).
 - CREA will have online platform that will have educational materials and links to technical service offerings.

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Federal

- **Dairy Business Innovation Initiatives - \$23 million**
 - USDA program
 - Goal is to support dairy businesses in the development, production, marketing, and distribution of dairy products
 - Northeast Dairy Business Innovation Center (NE DBIC) - <https://nedairyinnovation.com/>
 - Based in VT
 - Supports dairy farmers and processors in 11 states (including NY) through grants, access to technical services, education, and events
- **Partnerships for Climate-Smart Commodities**
 - USDA program; \$3.1 billion investment in 141 selected projects
 - Projects will provide technical and financial assistance to producers to implement climate-smart production practices on working lands; pilot innovative and cost-effective methods for quantification, monitoring, reporting and verification of greenhouse gas benefits; and develop markets and promote the resulting climate-smart commodities
 - Most projects cover multiple states
 - More information at <https://www.usda.gov/climate-solutions/climate-smart-commodities>
 - NYS DEC, in partnership with AGM, Cornell University, SUNY ESF, and Syracuse University were awarded \$60 million from this federal program in fall 2023 to implement climate smart agriculture and forestry practices; see <https://www.dec.ny.gov/lands/127744.html>
- **USDA Agricultural Marketing Service – <http://www.ams.usda.gov>**
 - 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 - <http://www.fsa.usda.gov/FSA>**
 - *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 - How to start a farm - <https://www.farmers.gov/your-business/beginning-farmers>**
 - Provides step-by-step instructions in different phases on how exactly to go about establishing a farm.
 - Along the way, the website provides resources to different grants and other kinds of education in order to make the establishment of a farm go successfully.
 - Contains a blog with experiences and Q&As from beginner farmers in order to give context and ideas to other beginning farmers.
- **USDA Natural Resources Conservation Service - <http://www.nrcs.usda.gov>**
 - *Agricultural Management Assistance*: helps agricultural producers use conservation to manage risk and solve natural resource issues through natural resources conservation.

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- *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*: 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.
- **USDA Rural Development, New York Office** – <https://www.rd.usda.gov/>
 - *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.

Other/Nationwide

- **Agricultural Marketing Resource Center** – <http://www.agmrc.org>
 - Addresses marketing and business planning for U.S. agricultural producers.
- **Cornell Small Farms Program** - <https://smallfarms.cornell.edu/>
 - Collection of in-depth resources on farming to help farmers, educators and others learn more deeply about various aspects of the business of farming.
 - Helps local farmers by operating projects on farmland in order to help pioneer the future of farming.
 - Different courses and educational materials are available throughout the website.
- **Dirt Capital Partners** – www.dirtpartners.com
 - Invests in farmland in partnership with sustainable farmers throughout the northeastern U.S., promoting land access and security for farmers while keeping farmland in productive use. Most of their land investment partnerships result from a farmer contacting Dirt Capital with one of the following scenarios: 1) Farm operation has been leasing land, has a successful operation, and wants to purchase their leased parcel or relocate to a larger and/or more secure farm; 2) Successful farm operation is looking to expand by acquiring adjacent or nearby land; or 3) Retiring farmer wants to keep his or her farm in active production, and would like to transition the farm to family members or other successor farmers.
- **Equity Trust** - www.equitytrust.org
 - A small, national non-profit organization committed to helping communities gain ownership interests in land and other local resources; works to make economic changes that balance the needs of individuals with the needs of the community.
 - Program areas include: 1) Farms for Farmers - promotes alternative ownership structures for farms, to benefit farmers who need affordable farmland and communities that want a

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secure source of locally grown food and a way to preserve their environmental heritage; 2) Equity Trust Fund - a revolving loan fund enabling socially conscious lenders and donors to support projects that are creating new ways of owning, using, and stewarding property; and 3) Our Property and Values Program - promotes exploration, understanding, and implementation of socially equitable forms of property ownership and economics based on principles of social justice, equity, and environmental sustainability.

- **Farm Aid Resource Network** - <https://www.farmaid.org/our-work/resources-for-farmers>
 - Connects farmers to services, tools, opportunities, and resources.
- **Farmer Veteran Coalition** - <http://www.farmvetco.org>
 - Farmer Veteran Fellowship Fund - Small grant program providing direct assistance to veterans who are in their beginning years of farming/ranching.
 - No money directly to veterans, but rather to third-party vendors the veteran has identified will make a difference for them.
 - Awards range from \$1,000 to \$5,000, with nearly \$4 million awarded to more than 930 veterans since 2011
 - Provides links to storefronts of veteran-owned farms.
 - Provides training programs, farming resources, business resources, farm financing options, and more to veterans.
- **National Farm to School Network** - <http://www.farmentoschool.org>
- **National Good Agricultural Practices Program (through Cornell)** - <https://cals.cornell.edu/national-good-agricultural-practices-program>
- **National Sustainable Agriculture Information Service** - <http://attra.ncat.org/index.php>
 - Source of sustainable agriculture information for farmers and others involved with farming.
 - Agricultural specialists provide individualized assistance to those involved with agriculture directly.
 - Runs an internship hub that connects those who want to get involved with farming to those offering positions. The network is nationwide. Users can either find an internship or recruit an intern.
 - Online forum run in order to enable farmers to connect with each other across the nation to share information.
- **Niche Meat Processor Assistance Network** - <https://www.nichemeatprocessing.org/>
 - Provides training and technical assistance to small meat processing operations throughout the United States
 - Open for meat processors, livestock producers, and companies involved with the equipment and other accoutrement involved in meat processing, among others.
- **Ohio Direct Marketing Food & Agriculture** - <http://u.osu.edu/fox.264>
 - From Ohio State University, a blog with marketing news and trends and other resources for agricultural producers and marketers.
- **Rodale Institute Your Two Cents Fund** – <http://rodaleinstitute.org/assets/TwoCentsRFP-20Acres+.pdf>
 - Offers grants of up to \$5,000 to farmers who are transitioning to certified organic production or have recently obtained organic certification.
- **U.S. Farmstay Association – Starting a Farmstay** - <http://www.farmstayus.com/for-farms/starting-a-farm-stay>
 - A farmstay is essentially a hotel sort of experience but on a farm and helps farmers make more money and helps people get out into the countryside more.

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- More information on actually starting a farmstay is behind a paywall for members of the Farm Stay community only
- **WWOOF (World Wide Opportunities on Organic Farms)** - <http://www.woof.net>
 - Website linking volunteers/interns with organic farms and growers.