

HERKIMER COUNTY
AGRICULTURAL
AND FARMLAND
PROTECTION PLAN
ADOPTED JULY 2020

Part I

A Strategic Plan for
Agricultural
Enhancement in the
County

Forward

Planning for Herkimer County Agricultural Resiliency and Sustainability in the Face of a Pandemic

The recent COVID-19 pandemic has resulted in both health and economic crises. As the pandemic unfolded, many adverse issues related to agriculture and food systems emerged across the State and country. These ranged from food chain disruptions, food shortages, and retail price spikes, to loss of wholesale markets, dumping of unsold milk and fresh vegetables, and plummeting commodity prices for farmers.

The weaknesses in our food systems have been recognized for many years as contributing to the loss of local farms, farmland, food accessibility, and food processing capacity. Many of these ongoing issues were identified in 2002 as part of the original Herkimer County Agricultural and Farmland Protection Plan and remain relevant (see page 14 for a summary). The health crisis hasn't necessarily created the issues, but rather aggravated and further accentuated them.

The negative impacts of the COVID-19 pandemic on agriculture have begun to be identified from various places in the United States.¹ Other impacts may not be apparent yet but may arise when fall harvest arrives. Current known impacts include the following:

- **Intensified labor issues.** H2A farm labor and other immigrant and local labor will not be available. This is exacerbated by current unemployment programs that pay more than working on a farm.
- **Price volatility and falling commodity prices.** Lack of cash puts operations and planting season at risk; farmers need cash for maintenance of operations, as well as for spring planting. Cash flow concerns impact future buying power of farms, and this will have a ripple effect on many other businesses.
- **Loss of wholesale and restaurant markets.** The loss of demand for food products from local institutional buyers such as schools and restaurants has caused oversaturation of some ag products. This has hit produce growers and dairy especially hard.
- **Lack of processing and delivery capacity** at the local level means locally produced foods are unable to reach markets efficiently, if at all. The limited options for meat packing and processing especially hampers beef farmers ability to fulfill local demand.
- **Small local businesses can't compete with chain businesses.** Large grocery stores and chain stores have remained open throughout NY's PAUSE, but small nurseries, garden stores, greenhouses, etc. are closed and will experience a decline in income as people become even

¹ Information from the Erie County Agricultural and Farmland Protection Board, and the Ohio Farm Bureau April 2020 Survey (Farm, Food and Agribusiness Covid-19 Impact Survey).

more accustomed to purchasing goods at larger, chain businesses that are less likely to stock locally-grown products.

- **Less capacity to service farmers.** Government agencies and support staff have been required to reduce staff time which hinders the ability to service the farmers in the same capacity. Lack of agri-business ability to service farms also adversely impacts farmers. For example, construction projects needed by a farm are likely to have been put on hold due to a construction company's limited staff or ability to complete the work. In a time when the agricultural community needs more help, agencies and the service providers have LESS capacity to provide services.
- **Loss of local marketing and purchasing opportunities.** Cancellation of local events (fairs and festivals), closed farm markets, and uncertainty regarding protocols for U-Pick operations and on-farm sales will decrease agri-tourism.
- **Price Increases.** An increase in consumer purchasing of some products has led to higher prices and short supplies. These price increases do not usually benefit the farmer.
- **Feed shortages and increased costs.** There are fears that there will be a limited availability of livestock feed used by some farmers as well as increased cost of supplies as they run low.
- **Lack of broadband access.** Lack of broadband capacity in some areas means that farms – unlike retailers - can't take advantage of online tools that allow customers to order products by credit card.
- **Concerns related to farm owner and farm worker safety, and their physical and mental health.**
- **Supply chain disruptions and purchasing limits** (especially related to milk and milk dumping).

On the positive side, there is much more interest among public consumers in purchasing local food products now. Online sales of New York State agricultural products have increased, local beef producers across New York State are sold out, and farmers markets that are in operation have experienced an increased volume of sales. The New York Farm Bureau recently highlighted how farmers are taking advantage of new opportunities such as selling to newly formed neighborhood buying groups, developing new marketing plans oriented to online purchases, and other innovations. They also report that dairy farms processing and bottling their own milk have seen a huge surge in business.² Other programs including the New York State "Nourish New York" initiative was initiated to purchase food and food products from upstate New York farms to supply food banks across the state.³ Resurging interest in local foods could be a huge opportunity for Herkimer County farms. This Plan lays the groundwork to help farmers along with the County and its agri-partners take advantage of that opportunity.

Although primarily developed before the health crisis began, this Agricultural and Farmland Protection Plan remains fully aligned with those actions needed to help Herkimer County farmers recover from recent and long term adverse trends. This Plan establishes a forward-thinking vision for agriculture in the County that focuses on enhancing local farms and foods; retaining, diversifying and expanding

² Grassroots May 2020 (A Newsletter of the New York Farm Bureau).

³ NBC New York, "20,000 Families Expected to Receive Food From 'Nourish New York' Initiative." May 7, 2020 <https://www.nbcnewyork.com/news/coronavirus/20000-families-expected-to-receive-food-from-nourish-new-york-initiative/2407033/>.

farms; and enhancing processing and distribution to make more local foods accessible in Herkimer County communities. This Plan's goals seek to increase farm resiliency and viability, attract new food processing businesses, improve awareness of local food and farm products in the County, enhance the promotion and marketing of farms and farm products, and increase value-added farm operations.

Dozens of viable, recommended actions to "Grow Herkimer County" are offered in this Plan. Efforts should start with the formation of a Herkimer County Agricultural Council to coordinate the tasks and actions needed to initiate recovery. A unified and coordinated approach is critical to create an effective local food system that benefits both farmers and consumers. Coordination between the Herkimer County IDA, Cornell Cooperative Extension, Herkimer County Farm Bureau, Soil and Water Conservation District, Natural Resources Conservation Service, and others is a crucial first step needed to effectively harness the creativity and resources in the County to enhance agriculture and local food availability.

The Plan describes and recommends improvements to many agricultural programs already in place in the County, but in need of strengthening. It also details many other programs successful elsewhere but not yet fully applied in the County. For example, more attention to programs such as New York's Grown and Certified and Taste of New York programs, Baskets to Pallets, local festivals, the Dairy Business Innovation Initiative, the US EPA Local Foods, Local Places program and others is needed.

New strategies for diversifying farm operations in the County are also detailed in the Plan. These include efforts to increase vegetable production, beef operations, pasture dairy, cheese making and other value-added farming activities, all of which have great opportunities in the County. Other priority projects include developing a local agricultural promotion and marketing program, enhancing agricultural education efforts, and hiring an agricultural economic development specialist to spearhead these efforts.

Herkimer County has the location, infrastructure, and land resources to support greater agricultural activity. The Plan outlines many new initiatives to accomplish this. As the health crisis diminishes, recovery from the economic crisis will continue. Agriculture has and will continue to play a vital role in the Herkimer County economy. More than ever, our residents recognize the importance of our farms and local food supplies. This Plan's completion comes at an important juncture and offers a road map to guide that recovery.

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Appendix B: Agriculture in The County

- Farm and Farmland Characteristics
- Agricultural District and Assessment Participation in Herkimer County
- Farmland Soils
- Protected Lands
- Wetlands
- Floodplains
- Watersheds and Drainage
- Regulatory Framework in Herkimer County and Its Relation to Farming

Appendix C: Public Input Results

- Summary of Farmer/Farmland Owner Survey
- Detailed Farmer/Farmland Owner Survey Results
- Focus Group Results
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- Overall Observations of Town Land Use Plans and Laws
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Appendix E: Sample Agricultural Data Statement

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Appendix G. Supplemental Information on Federal, State and Other Programs

Appendix I. SARE Northeast Ny Fact Sheet

Appendix J. Sample Right to Farm Law

Acknowledgments and Funding



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Herkimer County Legislature 2020-21 Herkimer County Legislature

- | | | |
|------------------------|----------------------------|-----------------------------|
| 1 - Gregory Malta, Sr. | 7 - William E. Keeler, Sr. | 13 - Ray Donley |
| 2 - Mark Gaworecki | 8 - John L. Brezinski | 14 - Peter J. Campione |
| 3 - Robert J. Schrader | 9 - Peter F. Manno | 15 - Patrick E. Russell |
| 4 - Bob Hollum | 10 - Raymond Smith | 16 - Frederick J. Shaw, Jr. |
| 5 - Raymond Johnson | 11 - Vincent J. Bono | 17- William Weakley |
| 6 - John P. Stephens | 12 - Kurt J. Ackerman | |

Herkimer County Agricultural and Farmland Protection Board (AFPB)

- | | | |
|-------------------|-----------------------|------------------------------------|
| Bernard Peplinski | Lorraine Lewandrowski | Kirk Schwasnick |
| Fred Shaw, Jr. | Ted Teletnick | Beth Sadlon |
| Gerry Smithson | Tom Farnell | James Entwistle |
| Garet Livermore | Guy Sassaman | Jeffrey Kehoe (NYS Ag and Markets) |

Agricultural and Farmland Protection Plan Steering Committee

- | | | | |
|----------------|------------------------------|-----------------|-----------------------|
| Peter Campione | Jim Entwistle | Tom Farnell | Mary Franklin |
| Todd Heyn | Tyler Kelley | Garet Livermore | Lorraine Lewandrowski |
| Matt Pawlusik | Bernard Peplinski | John Piseck | Guy Sassaman |
| Beth Sadlon | Kirk Schwasnick | Fred Shaw | Gerry Smithson |
| Ted Teletnick | Jeffrey Kehoe - Ag & Markets | | |

Project Consultants

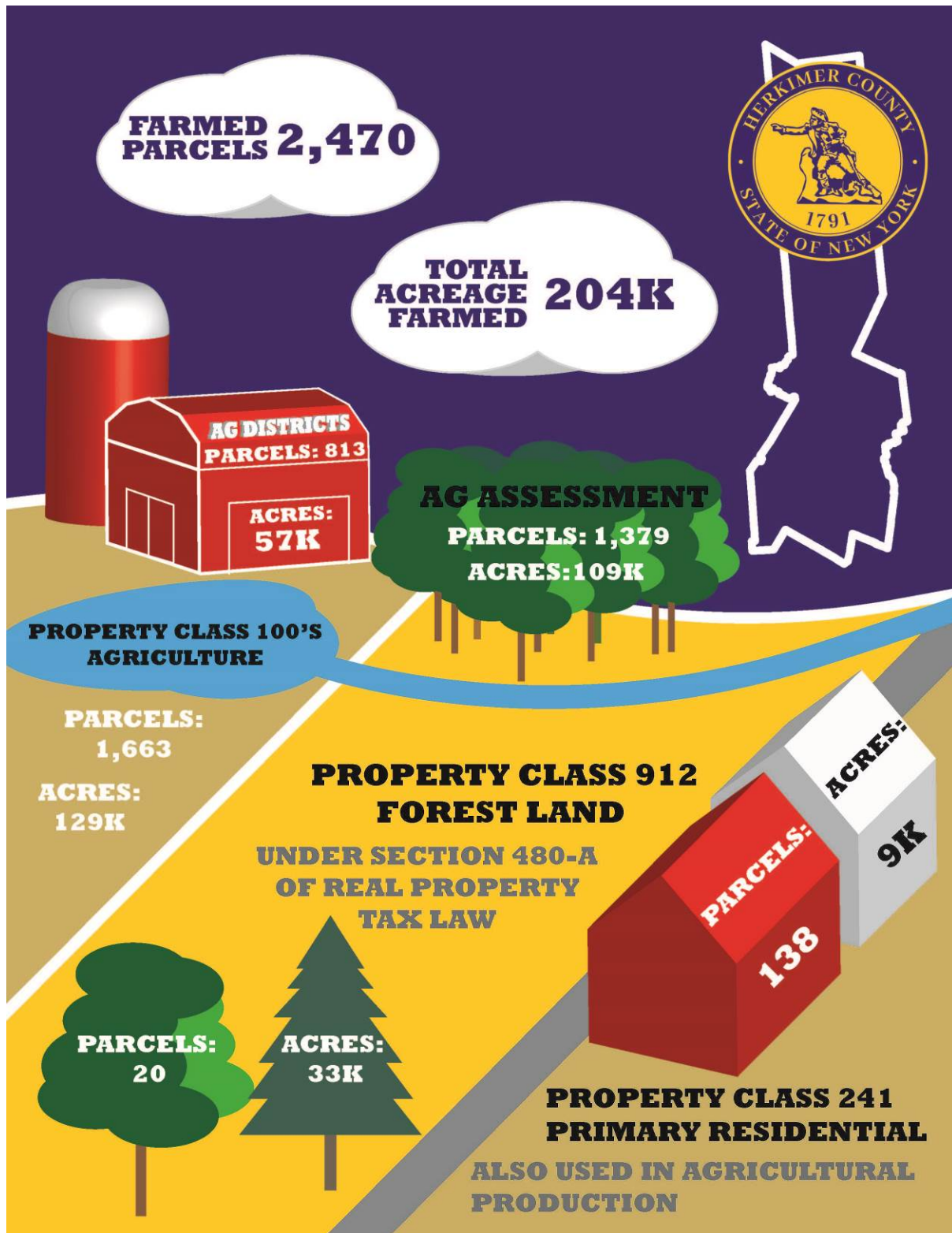
Community Planning and Environmental Associates (CP&EA)
Nan Stolzenburg, AICP CEP
Veronica Soeller



E.M. Pemrick & Co.
Ellen M. Pemrick



All GIS Analysis and Mapping Provided by Matthew Pawlusik, GIS Analyst, Oneida County Department of Planning, GIS Division of the Herkimer-Oneida Counties Comprehensive Planning Program



Introduction

Why a County Plan devoted to Agriculture?

Herkimer County has a long, rich and proud history of farming. Agriculture has long shaped our landscapes, our communities and our way of life. In the 19th century cheese was the agricultural product that Herkimer County was known for across the United States and in Europe. The Cheese Market in Little Falls brought buyers representing dairy merchants from all the major cities and European concerns. The quality of cheese produced in the County was considered second to none in the marketplace. By the 1880's Herkimer Cheese was advertised for sale by merchants in New York, San Francisco and London. It brought a premium price equal to the best English and German cheeses. The twentieth century saw the decline of the famous cheese, due to many factors including the sale of counterfeit Herkimer Cheese made in other locales to a lower standard and then labeled as the genuine product. The County's cheese production heritage is celebrated at the annual Little Falls Cheese Festival, held in July and through the four-county Cheese Trail.

Today, agriculture continues to play a significant role in the County's economy, landscape, environment, and quality of life. Almost twenty years ago (2002), Herkimer County adopted its first Agricultural and Farmland Protection Plan. Since then, the agricultural industry has been buffeted by many challenges. The dairy economy has weathered much variability, with highs and lows. Today, the dairy industry throughout the northeast is stressed. The time is right to re-evaluate current conditions for agriculture in the County and establish new efforts that will ensure Herkimer County remains agriculturally vital.

This Plan recognizes that agriculture is changing in Herkimer County and that there are many more pressures on farms and farmland than there once were. These pressures include low profitability, solar development, residential development, loss of small dairy farms, aging farmers, lack of a new generation of farmers, and even vacancy of former farmland.

If we are to ensure a continuation of a healthy and vibrant agricultural industry, there must be a concerted effort to maintain and enhance this critical economic driver in the County. This Plan identifies both current challenges and new opportunities for farming in the County. This updated 2020 Agricultural and Farmland Protection Plan builds on the 2002 Plan, evaluates trends and changes taking place, expands on the previous recommendations made and offers new strategies with a focus on agricultural economic development.

The positive news is that there are many opportunities that Herkimer can take advantage of: The County has the land base, weather, transportation system, and strong farm-support infrastructure in place to take advantage of new farm and agri-business opportunities. The County's location in the Mohawk Valley is a huge opportunity that could drive additional food-oriented business development. There is a resurgence in interest in local food, and more young people are interested in agricultural careers.

This Plan outlines a positive, long-term vision for agriculture in Herkimer County. It recognizes the challenges but offers a comprehensive toolbox that can be put to work to enhance agriculture. It offers priority projects that can be implemented right away to provide a new foundation and renewed enthusiasm for agriculture in the County. It offers a wealth of opportunities for both Mohawk Valley farms as well as agroforestry prospects in northern Herkimer County. The Plan provides a clear pathway to celebrate, enhance and support an industry that is the foundation and backbone of Herkimer's economy and communities.

How this Plan was Developed

This Plan updates a previous Herkimer County Agricultural and Farmland Protection Plan that was completed in 2002. The planning process for this Plan began after funding was secured from the New York State Department of Agriculture and Markets in 2018. Over the course of about 18 months, a steering committee comprised of farmers, ag-related agencies and businesses, county representatives and consultants (together called the "Steering Committee") held meetings, gathered data and solicited feedback from the farming and agri-business community.

The Steering Committee's work to develop this Plan was organized around answering three basic questions:

1. What are the current conditions in agriculture in the County?
2. What are the issues, opportunities and direction the County and the farm community wants agriculture to take in the future?
3. What actions are needed that can take advantage of those opportunities?

To answer these questions, the Steering Committee developed a series of focus groups where specific stakeholders were invited to a round-table discussion, a county-wide online survey of farmers and farmland owners, and a survey of elected and appointed town/village officials. Full reporting of the public input results can be found in Part 2 of this Plan, Appendix C. Specifically, the Steering Committee received input from the following:

1. A written questionnaire for farmers in which 112 participated;
2. A dairy and livestock focus group meeting attended by 13 representatives of businesses and service agencies;
3. An agricultural educator focus group meeting attended by 8 representatives of schools, Cooperative Extension, and other agencies;
4. An ag tourism and niche agricultural focus group meeting attended by 10 representatives of farms, festivals, the chamber of commerce, and other agri-tourism and niche ag operations;
5. An agricultural business and farm consultants focus group meeting attended by 12 representatives of businesses and service agencies such as bank, farm bureau, land trust, county fair, and others;

6. Sixteen towns, three Villages, and 41 elected and appointed individuals participated in an Elected Officials Survey;
7. 68 farmers participated in an online survey; and
8. 41 non-farmer landowners who rent land to farmers participated in an online survey.

Appendix C, in Part 2 of this Plan, provides full details and results from all public input efforts. This public input was especially informative and provides the foundation upon which the Plan's vision, goals, and recommendations are built.

After the draft Plan was completed, the Steering Committee held a public presentation and hearing on it, then submitted it to the Herkimer County Legislature Natural Resource Committee for review in June, 2020. Subsequently, the draft plan was submitted to the full County Legislature for their consideration and adoption. The Final Plan was submitted to the Commissioner of the NYS Department of Agriculture and Markets for final approval in July 2020.

The Benefits of our Agricultural Economy

Agriculture has been and continues to be a critical part of the County's economy. The economic benefits of agriculture are significant: it is a dominant land use using almost 117,780 acres of farmland on 596 farms; it directly employs 1,500 people (including both employees and farm proprietors) and has a \$4.7 million total payroll. Agriculture produces more than \$58 million in agricultural sales annually (2017 USDA Ag Census) that contributes to our overall economy. In turn, multiple businesses such as seed distributors, equipment suppliers, veterinarians, custom field work operations, and other small businesses rely on area farms for their success.

Agricultural operations and activities in Herkimer County have become increasingly diverse and there has been more recent activity related to field crops, maple syrup, vegetables, nursery and greenhouse production, and raising mixed livestock compared to in the past. The value of agricultural products sold directly to consumers through such venues as farm stands and farmers markets increased from \$498,000 in 1997 to \$1.4 million in 2017. Similarly, organic product sales have increased dramatically.

That \$58 million in direct agricultural sales is only part of the economic story. According to a recent statewide study by Cornell University economist Dr. Todd M. Schmit, for every additional dollar generated in on-farm agricultural output, an additional 45 cents is generated in non-agricultural industry sectors such as wholesale trade, agricultural support services and animal food manufacturing. Farmers purchase supplies and services from many other local businesses, and the income earned by employees of both farms and other businesses supported by those farms generates money used in successive rounds of spending elsewhere.

Farmland is also good for the local tax base. Why is this? As the old adage goes, "cows don't go to school." Multiple fiscal impact studies done throughout New York State show that farmland produces a

net tax profit for towns and schools because farmland pays more in taxes than it receives back in public services. This is true even when the land is assessed at its current, agricultural use. The findings of 15 fiscal impact studies in New York show that farmland cost towns only \$.29 for every \$1.00 paid in taxes, while residential land costs towns \$1.27 for every \$1.00 paid in taxes.⁴ In short, agriculture keeps local property taxes lower than if the land were developed for most residential types of development. Interestingly, people are largely unaware of this key fact about local taxes.

Beyond economics, farming is a way of life that influences many in Herkimer County. Some of the ancillary benefits of our agricultural and forestry economy include:

1. Generating entrepreneurial and creative opportunities which pave the way towards more economic growth, such as specialty cheesemaking and craft beverage tours;
2. Maintaining diverse and scenic landscapes, providing clean air, clean water, and wildlife habitats;
3. Maintaining open lands that can mitigate the affects of severe weather changes;
4. Preserving the lifestyle of our rural communities;
5. Minimizing costs of providing public services such as roads, schools and public safety infrastructure;
6. Putting focus on, and helping to preserve, our unique history and regional architecture; and
7. Providing recreational opportunities and scenic landscapes that appeal to residents and tourists.

The Challenges facing our Agricultural Economy

With all those positives, Herkimer County farmers face significant issues right now that threaten the economic foundation of our industry and County. These issues include low farm profitability and declining sales of livestock and their products, aging farmer population, lack of a new generation of farmers, loss of dairy farms, unknown impacts of solar development on farms, changes in weather patterns that adversely impact crops, increased non-farm development in close proximity to farming areas, loss of farms and farm-related employment, and loss of farmland.

Changes in Agriculture 1997-2017

There have been many changes in the agricultural community in Herkimer County over the past few decades. Part 2, Appendix B details these changes. Unfortunately, many of the changes have been negative, and reflect the current, stressed condition of the agricultural industry in the County. Between 1997 and 2017, U.S. Census of Agriculture data shows the following trends:

⁴ David Haight, Laura Ten Eyck and Sanaz Arjomand. *Cultivate New York, An Agenda to Protect Farmland for Growing Food and the Economy*, Saratoga Springs, NY: American Farmland Trust, 2016, pg.11.

- ↓ Number of farms have decreased 10%
- ↓ Acres of farmland have decreased 21% or 31,000 acres
- ↓ Number of mid-size and large farms have decreased
- ↑ Growth in numbers of farms < 100 acres in size
- ↑ Number of farms with sales < \$10,000 have increased
- ↓ Number of farms with sales between \$50,000 and \$99,999 decreased
- ↓ Share of total agricultural sales for dairy is 67% of all sales, a decrease from 80% of all sales in 1997
- ↓ Number of dairy farms has decreased to 21% of all farms when they were 43% in 1997
- ↓ Total farm sales have declined 18%
- ↑ Number of milk cows per dairy farm has increased
- ↑ Diversity of agricultural operations and activities has increased
- ↑ Average milk production per farm has increased
- ↑ Value of agricultural products sold directly to consumers increased from \$498,000 in 1997 to \$1.36 million in 2017
- ↑ Organic product sales have increased dramatically
- ↑ Sales of crops in inflation-adjusted dollars increased 128%
- ↓ Sales of livestock and their products in inflation-adjusted dollars declined 32%

Conversion Pressure

Agricultural success is dependent on the availability of land, processors, suppliers, agricultural services, and many others. Farmers also rely on other farmers in their community for equipment sharing, custom work, and projects shared between adjacent lands. Farmers also need transportation systems and other infrastructure such as programs and training from the Natural Resources Conservation Service, Farm Service Agency, Herkimer County Soil and Water Conservation District and Herkimer County Cornell Cooperative Extension to support their operations.

A concentration of farmers generates an economy of scale that allows them to share and access services more economically than isolated producers. As an agricultural community shrinks, there is potential that there will not be enough production to support the related services that currently exist, and benefits from economies of scale may be lost. Without supportive infrastructure, the agricultural industry may not be able to sustain itself. This raises the concept of 'critical mass in agriculture' – meaning that a certain concentration of farms is needed to make them all sustainable. Economic success of our farms will not be realized if the County loses its critical mass of farms. As farms are converted to non-farm uses, the critical mass of farms is diminished.

Farmland can be lost when it is converted to urban uses, when it is abandoned, or when it is protected but used for non-farmed open spaces. Unfortunately, farmland in Herkimer County has been lost: Compared to 1997, there are 31,000 fewer acres of farmland. While there are many reasons why this loss occurred, its long-term implications and strategies to prevent a further decline in farmland are an important piece of this Plan.

Conversion pressure on farmland can be measured in several direct and indirect ways:

- Population Change – Where and level of change?
- Housing Change – Where and how much additional housing is being built?
- Critical Mass of Farmland – where is the critical mass of priority farmland in Herkimer County and are these areas under conversion pressure?

In Herkimer County, population has been relatively static over the last few years but is projected to decrease (64,427 people in 2000, 64,519 in 2010, and estimated to be 61,833 in 2018). The County has experienced outmigration and an aging population, both of which contribute to lack of population growth. However, even while population has not risen, the number of housing units has.

In 2000, there were 32,026 housing units. In 2010 there were 33,381 units, and recent estimates from 2013-2017 show 33,726 units. The expansion of housing without a similar rise in population is a demographic trend found throughout many parts of upstate New York. It conveys a message: Increases in housing without population growth is often called ‘rural sprawl’ and can be an indirect measure of conversion pressure as farmlands are converted to housing.

Where has growth in Herkimer County taken place? The locations of this development are shown on the ‘Residential Structures Built’ map. Between 2002 and 2019, 1,943 houses were built in Herkimer County. The map shows that new housing development was widespread, especially across the Mohawk Valley portion of the County. Housing growth was not particularly concentrated around city or village areas and overlaps considerably with locations of farmland. There are however, three ‘hot spots’ of residential development in the County.

These three hot spots are shown on the Residential Structures Built Hot Spot Map, created from data from the Herkimer County Office of Real Property. Using ESRI Arc GIS mapping software, the incidence of new residential structures built since 2002 were organized and identified through finding statistically significant spatial clusters. Zone 1, located in the Old Forge/Town of Webb area, had a clear statistical significance as a hot spot in relation to all other new housing data. Zone 2, in the Herkimer/Ilion/Frankfort area and another around Little Falls were less significant hot spots, but statistically different enough from the other incidences of residential development to show as a cluster.

However, given the widespread nature of new building, the pattern shows housing growth is taking place on and near farms. This growth is within areas located in the NYS Certified Agricultural District, on prime farmland soils and farmland soils of statewide importance, and where Herkimer County’s

important farmlands are identified (See Priority Farmland Areas Map). Increased housing development in farming areas will, in the long-term, reduce the critical mass of farms and also increase the likelihood of more adverse farmer/non-farmer interactions – both of which will impact farms negatively.

Opportunities for our Agricultural Economy

Even with these challenges, there are many opportunities to enhance and expand agriculture. The County's good soils, water, affordable land, and ready access to road and highway transportation routes are important features that will continue to support agriculture and agri-businesses. Herkimer County has available infrastructure to support more agri-business and food processing, and excellent access to transportation systems.

A renewed interest in ag-education in area schools can foster a new generation of ag-entrepreneurs. Agencies such as the Herkimer County Industrial Development Agency (IDA), Cornell Cooperative Extension (CCE), Herkimer County Soil and Water Conservation District (SWCD) and area farmers and agri-businesses support county involvement in agricultural enhancement and have identified many programs that can be put to work to enhance agricultural economic development through farm diversification, promotion and marketing, technical training, farmland protection, and concentration on filling gaps in the local food system.

The ultimate purpose of this plan is to provide a roadmap for future projects, programs and policies that will benefit the agricultural economy in Herkimer County, building on the 2002 plan. The Plan is not regulatory in nature. Rather, it emphasizes economic development, long-range planning, incentives and collaboration. The Plan offers a series of short and long-term actions to solidify and grow the agricultural economy in the County.

Herkimer County's Vision for Agriculture

A vision statement sets the overall direction and describes the desired future characteristics for agriculture. The following statement captures the long-term vision the County has for its agricultural sector and should inspire and offer a sense of purpose and direction for Herkimer. The short and long-term goals that follow further define the direction Herkimer County desires to take and will be the foundation to guide future decision making.

Our vision is for agriculture in Herkimer County to be known and appreciated for its contribution to the county's rural quality of life. For over two centuries and through many transitions, agriculture has been at the center of Herkimer's economy and culture. We have seen farming grow in Herkimer County from pioneers' subsistence farms to be a center for cheese production and export worldwide in the 19th century. Today, Herkimer is home to a diversity of farms that annually contribute almost \$60 million in sales and that will continue to be a strong, growing, profitable and resilient component of the county's economy.

To achieve this, we must continue to protect accessible and affordable prime and important farmlands as a viable land use, support core agribusinesses and services that are vital to farm operations and take advantage of new markets, crops and technologies. Herkimer will take advantage of its transportation, water and sewer infrastructure to enhance agriculture. New programs will be created to enhance the promotion and marketing of farms and local agricultural products, to provide for agricultural education, and to attract new farm operations, food processing and food distribution businesses. We will retain, diversify, and expand farms to foster the growth of the agricultural economy and support our rural communities. The public will be aware of and proud of agriculture's role in the County and in their lives and will continue to support and nurture the agricultural community.

Herkimer County's Agricultural Goals

Goal statements come from the vision statement and offer more concise direction for future actions. Goals should be clearly defined, measurable, and attainable, and serve to guide specific actions. When those actions are implemented, the goal will be attained and together with other goals, the vision outlined above will have been met. Goals to enhance agriculture in Herkimer County are:

- ▶ **Goal 1: Increase farm resiliency, viability and profitability.**
- ▶ **Goal 2: Promote diversification of farm operations.**
- ▶ **Goal 3: Build on Herkimer County's assets and take advantage of existing transportation, water and sewer infrastructure to attract food processing and enhance farming opportunities.**
- ▶ **Goal 4: Foster a better identity for agriculture in the County, improve awareness about the important role agriculture plays in the county, and enhance the promotion and marketing of farms and farm products.**
- ▶ **Goal 5: Improve opportunities for ag-related education, training, and ag-career advancement.**
- ▶ **Goal 6: Expand protection of critical farmlands for active agricultural use and enhance the farm-friendliness of local land use regulations.**
- ▶ **Goal 7: Secure funding and enhance the structural capacity of the County and other organizations involved with agriculture in the County to effectively implement this plan.**

Summary of Agricultural Strengths, Weaknesses, Opportunities and Threats in Herkimer County

Identification of Issues

The first step to enhancing agriculture is to understand the key issues facing farms and farm operations in Herkimer County. That understanding came from evaluating current conditions and listening to the farm community, agricultural businesses, farm support agencies and the general public. This information was organized into four categories: agriculture’s strengths (S) and weaknesses (W) as well as new opportunities (O) and long-term threats (T) (also referred to by the acronym “SWOT”).⁵

The SWOT is important because the mission of this Plan is to help Herkimer County maintain features that are positive and that make agriculture strong. At the same time, the Plan addresses weaknesses, identifies ways to take advantage of new opportunities and helps prevent threats to agriculture from taking hold. The vision, goals, and actions proposed in this Plan are designed to address these major themes.

A summary of the critical findings from the SWOT are outlined below and full details are in Part 2, Appendix C.



⁵ Actual responses to the surveys and outreach efforts can be found in Appendix C

<p>STRENGTHS</p> <p>What is being done well? What unique resources does agriculture in the County have? What are our strengths?</p>
<ul style="list-style-type: none"> • Environmental resources such as ample water and good soils exist to support farming. • Many ag and farm related tourism and promotion activities exist such as the garlic festival, farm progress show, Farming the Future event at BOCES, and the Cheese Trail. • Farm infrastructure and agri-business are still available. • County is close to urban markets and excellent transportation links. • Farmland is still relatively affordable. • Agriculture remains a major industry in the County with \$57.9 million in sales. • Farms positively impact local economy. • Amish and Mennonite farmers are productive members of the farming community. • The number of farms with sales > \$500,000 has increased. • There has been growth and diversification with more niche/specialty farms. • There has been growth in average milk production per dairy farm. • There has been increasing diversification of farms. More farms are growing produce and there are more organic farms. • Greater interest in ag education has led to reinvigorating school agriculture education programs (FFA). • New interest in local food products supports farm stands and farmers markets.

<p>WEAKNESSES</p> <p>What could be improved? Where are there fewer resources than others? What are our weaknesses?</p>
<ul style="list-style-type: none"> • Negative attitudes and perceptions about agriculture persist. • Farmers feel they have little voice to advocate for agriculture with supervisors, legislators, and the general public. • The general population doesn't understand agriculture and that can lead to nuisance complaints and farmer/non-farmer conflicts. Conflicts with non-farmers over manure spreading an increasing problem. This contributes to a general lack of public support for agriculture which goes along with lack of ag-education and awareness. • There is a resistance to having food processing facilities in local communities. • Many farmers on local food map are not yet ready to receive visitors and they are not taking advantage of interest in visiting farms. • The overall farm economy is not strong and there has been a loss of economic value, employees, income, and production over the past decade. • Costs of farming are very high. Coupled with low prices for farm products, this leads to low farm profit, and in many cases, loss of farms and farmlands. • Low prices for products, especially dairy is a significant issue.

WEAKNESSES

What could be improved?
 Where are there fewer resources than others?
 What are our weaknesses?

- Half of farms in the County have annual sales of less than \$10,000. There has been a decrease in number of mid-sized and large farms.
- While IDA has a significant emphasis on ag-related business development, overall there is a limited inclusion of agriculture in County economic development programs.
- Regulatory challenges make farming harder.
- Diminished support for farm support agencies and programs leads to an insufficient staff or funding to implement needed programs. Herkimer County SWCD has a large need for additional nutrient management planning. Many programs could be taken advantage of to enhance agriculture in the County if there were sufficient staff and funding to do so.
- Lack of communication and collaboration among all parties leads to less effective program delivery among ag-related agencies, repetition, and lack of leadership.
- Lack of farm infrastructure such as distribution, food hub, broadband, food processing, road maintenance all contributes to issues that make farming harder in the County.
- Loss of and/or consolidation of farms, especially dairy means that there are fewer, larger farms. This adversely affects agri-businesses and has other ripple effects in the broader economy in Herkimer County.
- It is difficult for farmers to know how to access markets.
- There is a lack of marketing and promotion of both the County and its ag products.
- Lack of new generation of farmers coupled with an aging farm population and lack of farm transition planning increases uncertainty.
- It is very hard and expensive for young people to enter farming.
- There is a lack of value-added agricultural production in the County.
- There are limited ag-tourism businesses.

OPPORTUNITIES

What opportunities are available to us?
 What trends can be taken advantage of?
 How can we turn our strengths into opportunities?

- Enhance promotion and marketing through a comprehensive program including advertising, branding, events.
- Develop incentives to attract new farmers.
- Promote local foods grown in County and develop programs to support those farmers.
- Expand regional programming.
- Enhance agricultural education.
- Develop new food processing facilities.
- Expand farm support agencies and organizations.
- Implement agriculture friendly zoning and local regulations.
- Put in place infrastructure to implement this plan.
- Initiate program to protect and preserve critical farmlands.
- Establish farmland preservation programs and expanded use of conservation easements.
- Start programs to retain and expand agriculture (See full list of opportunities in Part II SWOT).
- Establish a Herkimer County Land Trust.

THREATS

What threats can harm agriculture in the County?
 What threats do our weaknesses expose us to?

- Climate change and changes in weather patterns (see discussion in Part 2, Appendix F)
- Low prices for milk and other commodities.
- Ongoing loss of dairy farms.
- Price competition with large retailers.
- Operation costs that can't be sustained.
- National agricultural policies oriented toward production of cheap food.
- Lack of funding for farm support agencies.
- Aging farmer population.
- Reduced milk consumption.
- Increase in consumption of other beverages, especially other 'milk' products.

What Does the SWOT Tell Us?

The SWOT analysis identified topics critical to the future of agriculture: its positive features, weak links and opportunities. The Steering Committee used these findings to create a vision statement, a set of goals and the recommended strategies and actions that make up this Plan.

It became apparent from the SWOT analysis that there were seven major themes to address in developing strategies. These included:

1. Agricultural profitability and resiliency;
2. Diversification of farm activities;
3. Building on existing assets;
4. Improved marketing and promotion;
5. Improved agricultural education;
6. Protection of critical farmlands; and
7. Establishing an organizational structure within the County to implement needed programs.

Further, the SWOT helped identify several gaps that need to be addressed in order to fully attain the County's vision and goals for agriculture. These gaps especially include:

1. Funding and staff to carry out needed programs;
2. Technical assistance capacity to meet ongoing and emerging market needs; and
3. Promoting agriculture in schools and to the larger public audience.



Priority Projects to Enhance Our Agricultural Economy

Summary of Recommendations

This Plan presents a comprehensive set of tools that, when implemented, will serve to revitalize agriculture and enhance the agricultural economy. The toolbox includes three major recommendations:

1. Build capacity in the County to implement the plan.
2. Strengthen participation in and take advantage of existing programs, agencies and funding sources.
3. Initiate new programs.

The approach is straightforward: ensure there are staff, resources, and organization in place to develop and implement the needed initiatives, build on existing programs and efforts, and initiate new programs designed to help conditions in Herkimer County.

Within those three broad recommendations, many specific actions and strategies are detailed. These include:

1. **Seven specific recommendations to build capacity** including initiation of a County-led “Grow Herkimer County” effort and an agricultural council to oversee the efforts, maintaining important partners like the Industrial Development Agency (IDA), Cornell Cooperative Extension (CCE) and Soil and Water Conservation District (SWCD) and seeking funding for a staff coordinator position to bring it all together. Building capacity also means there is a need to seek new funding sources, expand regional programming where feasible, widely disseminate this Plan to build awareness and support, and identify all players in Herkimer County’s local food system.
2. **Three specific recommendations** are made to help Herkimer County **take advantage of the myriad of existing programs** that could be started or expanded in the County. These efforts revolve around strengthening farmer participation in the NYS Certified Agricultural Districts and Agricultural Assessment programs, better informing farmers of existing tax abatement programs that could benefit their farm operation, and most importantly, expanding efforts in existing programs. Many Federal and State agencies and private organizations have already successfully developed ag-related programs that could benefit Herkimer County farmers.
 - o **Twenty-three different existing programs** from the Taste of New York Program to the Cheese Tour, Garlic Festival, US EPA’s Local Foods, Local Places effort and the Herkimer County Local Food Map are specifically identified as ones that could be expanded or started. These are programs where the ‘wheel does not need to be reinvented’ and the programmatic elements and even funding sources already exist. To fully take advantage of these existing programs, Herkimer County needs to organize, and in some cases, seek funding, to initiate or expand them.

3. **Fifty-three ideas for new programs** that could be beneficial in Herkimer County. These strategies are further organized into five topics as follows:
- Topic 1: Diversify Farms - The Plan discusses how diversification of farms in the County can help improve sustainability, resiliency and profitability of farms. To address those needs, 21 different strategies are offered. These include actions such as:
 - Creating a soil nutrient management planner position
 - Improving high speed internet and broadband
 - Creating an online purchasing website for local foods
 - Initiating a Farm to Institution program
 - Developing a food hub
 - Promote high tunnels and other innovative methods to extend the growing season
 - Promote grass-based farming for livestock and poultry
 - Increasing agri-tourism
 - Enhancing value-added operations through training, revolving loan fund or microloans
 - Providing grant assistance to farmers.
 - Topic 2: Use existing infrastructure to enhance food processing in the County – The County has excellent transportation networks and water and sewer infrastructure that would be attractive for food aggregation and processing. The County has many opportunities to establish or recruit a food hub, meat processing, commercial kitchen, and other food processing establishments.
 - Topic 3: Promote and market agriculture – There has been a long-term, un-fulfilled need to develop a strategic and multi-pronged promotion and marketing plan in the County. This effort (also recommended in 2002), needs to address:
 - Promoting local foods and buying locally
 - Improving awareness of agriculture’s role in the County with elected officials
 - Increasing the general public’s understanding of agriculture, its role and needs
 - Local branding of products
 - Expanding farm-related events
 - Improving websites and increasing the presence of agriculture on them
 - Training farmers in marketing and promotion skills
 - Topic 4: Enhance agricultural education to grow a new generation of farmers – There is a great need in the County to ensure a new generation of farmers. Building on the re-emerging interest school districts have in agricultural education, the Plan offers 16 different initiatives to continue these efforts. Recommended strategies range from creating an annual forum on the role of agriculture in the County where all 11 school superintendents are invited to making specific invitation of educators to the Farm Progress Show and establishing a sponsorship program to help more students attend the NYS FFA Convention.

- Of importance is the idea to initiate a youth and young farmer mentoring/beginning farmer program. This was an initiative highly supported by the farm community. A mentoring program could support a new generation. There are many resources provided by the NYS Department of Agriculture and Markets, CCE, USDA, and the Young Farmers Coalition that could be useful in setting this up.
- Topic 5: Protect Farmland – The Plan emphasizes the importance of having quality, productive farmland protected for agricultural uses and crops. Farmland protection programs recommended in the plan include:
 - Developing a model solar law that local communities could use that allow for solar facilities that are compatible and beneficial for farming.
 - Using the Priority Farmland Areas map included in this Plan to advance and focus farmland protection efforts.
 - Working closely with the Otsego Land Trust or other land trusts, or forming a new land trust, to assist in the arrangements and management of conservation easements. Without a land trust closely involved, area farmers would not be very successful in participating in the New York State Farmland Protection Grant programs.
 - Adopting a Herkimer County Right to Farm Law and promoting adoption of a similar law in local towns. The Plan offers a model ordinance in Part 2, Appendix J.
 - Providing model laws that are agriculture-friendly and available to local municipalities to use. A ‘bank’ of model laws would be useful to promote agriculture-friendly land use planning in the County. Methods to be incorporated include use of conservation subdivision design to protect active farmlands during development, use of incentive zoning, use of agricultural overlay districts and buffers, and use of agricultural data statements and disclosure notices. See Part 2, Appendix E for a sample statement.
 - Enhancing the Agricultural Environmental Management program with NRCS and SWCD.
 - Providing land use training for town planning boards, zoning boards, and code enforcement officers so they are familiar with agriculture, the NYS Ag District Law, and local land use options.

Priority Projects

Three priorities have been recommended by the Steering Committee. These three projects are recognized in this Plan as being critical to ag-enhancement efforts. These three priority projects are:

1. **Develop and implement an Agricultural Promotion and Marketing Plan.** Throughout the planning process, all stakeholders and parties involved identified the need for more marketing and promotion. Recommendation # 3, Topic 3 outlines the need to make agricultural promotion and marketing a priority for Herkimer County. Development of a strategic marketing plan that different agencies and organizations could use is imperative. Multiple audiences need to be addressed with a concentrated marketing and promotion effort and include:
 - a. General Public – to enhance understanding and appreciation of the agricultural industry in the County.
 - b. New Farmers – to market Herkimer County as an excellent and affordable place to operate a farm or agri-business.
 - c. Consumers – to enhance knowledge and interest in purchasing local food and agricultural products including a branding campaign.
 - d. Farmers – to help provide farmers with the tools they need to be successful in marketing their products and/or welcoming tourists and consumers to their farm.

2. **Enhance agricultural education efforts** including initiation of a new farmer/beginning farmer program. This Plan also establishes a critical need to grow a new generation of farmers in Herkimer County. See Recommendation # 3, Topic 4 for more information. With an aging farmer population, agriculture will only continue in the County if there are new farmers to take over. There is a critical need to increase interest among young people in farming and ag-related businesses and to mentor them and assist them in getting involved in farming.

With an increasing number of school districts starting FFA programs, and accessibility to nearby Herkimer Community College and SUNY Cobleskill, there are excellent opportunities to encourage beginning farmers. As the overall agricultural economy outlook improves throughout the region, the advantages of farming and conducting agri-businesses in the Mohawk Valley will improve. More emphasis on growing a new generation of ag entrepreneurs is the second priority to address.

3. **Hire an Agricultural Development Specialist.** The Steering Committee has identified this as another critical priority. This Plan can only be implemented when there are people who have the time and expertise to carry out the necessary actions. Recommendation #1, Strategy B (2) establishes the need for greatly enhanced coordination, collaboration, and organization in order to make implementation of specific programs effective.

Herkimer County already has the foundational organization in place – specifically Cornell Cooperative Extension, Herkimer County Industrial Development Agency, Soil and Water Conservation District, federal ag-partners such as FSA and NRCS, and other local groups identified in this Plan. However, lack of capacity and coordination is currently an impediment to moving programs forward. As such, this Plan recommends creation of a Herkimer County Agricultural Council. This Council would be charged with taking leadership to implement this Plan.

While each organization can bring to bear its own strengths and experience on this council, there is a great need to create a structure in the County that promotes collaboration, is aggressive about seeking new funding, and is staffed with energetic and enthusiastic people committed to enhancing agriculture. The Steering Committee recognizes a keen need for a ‘boots on the ground’ person to help do and coordinate this work.

While the Council would be responsible for determining project priorities, assigning specific tasks to different agencies/organizations represented on the Council, seeking funding, and other tasks, a staff person must be available to coordinate, provide day to day direction, and serve as that “boots on the ground” to get the work done. This Plan recommends creation of an agricultural economic development specialist position housed within the Herkimer County IDA.

See Page 50 for more specifics on action steps needed to implement these three priorities.

Priority Farmlands

New York State has a long-standing farmland protection program. A landowner who wishes to sell their development rights through the state's Purchase of Development Rights (PDR) program must show that the proposed land is "...at a minimum, consistent with the location of any land or areas proposed to be protected in a county's or a municipality's agricultural and farmland protection plan". The State PDR program is designed to:

1. Preserve "viable agricultural land" as defined in §301 of the NYS Agriculture and Markets Law;
2. Protect farmland in areas facing significant development pressure; and
3. Protect lands that serve as a buffer for a significant natural public resource containing important ecosystem or habitat characteristics.

The specific state-level criteria for farmland preservation revolve around how well the lands proposed to be preserved:

1. Will preserve "viable agricultural land";
2. Is in areas facing significant development pressure;
3. Serve as a buffer for a significant natural public resource containing important ecosystem or habitat characteristics;
4. Protect prime farmland soils;
5. Protect farmland of statewide importance soils; and
6. Protect land used in agricultural production.

Farms cannot be successful without land resources. While having financially successful and sustainable farms is the best way to preserve farmland, we recognize that communities in Herkimer County will change and grow over time, and farmland will remain at risk for development or in some areas, abandonment.

The purpose of this section of the Plan is to identify important farmlands that could or should be preserved. As per the New York State Agricultural and Farmland Protection program (State's Circular 1500 of 2006) this Plan should define, identify and prioritize important farmlands that could be protected. This section discusses how 'important farmlands' were defined and identified and presents the results.

Analysis

Using a geographic information system (GIS), over 2,470 parcels in Herkimer County were analyzed for their relative agricultural value. The analysis included:

1. Active and vacant farm parcels as coded by tax assessments;
2. Parcels receiving an agricultural tax exemption;

3. Parcels that include agricultural use and/or have available land for agriculture but where agriculture is not the primary use;
4. Forest parcels enrolled in a 480a management plan (see Farmed Parcels – Property Class 912 – Forest Lands Participating in the State 480-a Program Map).

Different factors were identified and ranked, and each parcel was scored based on what factors were present. Features that define important farmlands in Herkimer County include farmland soils, size of the parcel, whether the farm is in the NYS Ag District, whether they receive an agricultural assessment (which signifies active farmland), conversion pressures facing that parcel, and natural resources that are associated with the farm. Table 1 below details the factors used and ranking weights given to each one. Each of these categories is explained in more detail in Table 2.

Four factors were identified that define what is priority farmland in Herkimer County: soils, factors that indicate long-term viability, development pressure factors, and protection of natural resources. Of those four, soils were given the most weight (.40), followed by the long-term viability factors (.35), conversion pressure indicators (.15) and natural resources (.10). Different specific features within each major category were identified. A total of 400 points was allocated to all the factors. See box for example.

Table 1. Summary of factors used in defining priority farmland.

FACTORS DEFINING PRIORITY FARMLAND		WEIGHTS
Soil Factors		.40
<u>16 Mineral Soil Categories</u>		
Total Available Points	100 Points	
Long Term Viability Factors		.35
Number of acres	30	
Parcels receive ag tax assessment	30	
Parcel has ag as primary use	25	
Parcel is in an ag district	10	
<u>Parcel has ag as a secondary use</u>	5	
Total Available Points	100 Points	
Conversion and Development Pressure Factors		.15
Frontage	25	
Distance to water and sewer lines	25	
Proximity to conserved land	25	
<u>Proximity to new development</u>	25	
Total Available Points	100 Points	
Protection of Natural Resources Factors		.10
Climate Resiliency Value	20	
Has surface water body	20	
Has DEC regulated wetland	20	
Has FIRM mapped flood zone	20	

FACTORS DEFINING PRIORITY FARMLAND		WEIGHTS	
Ecological Importance	20		
Total Available Points	100 Points		
TOTAL AVAILABLE POINTS	400 Points	TOTAL WEIGHTS	1.0

Table 2. Details of factors used in defining priority farmland.

Category	Scoring Criteria	Criteria Score/Weights	Category Rank
Value to Ag Production			.40
	% of parcel in Prime Soils Total Points 100		
	Mineral Soil 1a	100	
	Mineral Soil 1b	89	
	Mineral Soil 2a	89	
	Mineral Soil 2b	79	
	Mineral Soil 3a	79	
	Mineral Soil 3b	68	
	Mineral Soil 4a	68	
	Mineral Soil 4b	58	
	Mineral Soil 5a	58	
	Mineral Soil 5b	47	
	Mineral Soil 6a	47	
	Mineral Soil 6b	37	
	Mineral Soil 7	37	
	Mineral Soil 8	26	
	Mineral Soil 9	16	
	Mineral Soil 10	5	
Value to Long-Term Viability			.35
	Number of Acres	30 Max Points to be split among size categories (based on GIS analysis) >500 acres = 30 pts 201-500 acres = 25 pts 101-200 acres = 15 pts < 100 acres = 10 pts	
	Parcels receive ag tax assessment	30	
	Parcel with ag as primary use	25	
	Parcel is in an ag district	10	
	Parcel with ag as a secondary use	5	
Conversion and Development Pressure			.15
	Frontage along US, State or County Road	25 Points Total >2001' = 15 1001-2000' = 6 500 – 1000' = 4	

Category	Scoring Criteria	Criteria Score/Weights	Category Rank
	Distance to water or sewer district	25 Points Total	
		< ¼ mile = 4	
		¼ to ½ mile = 6	
		½ to 1 mile - 15	
	Parcels in proximity to conserved land	25 Points Total	
		Adjacent to conserved farmland = 15	
		Adjacent to other federal, State, County or private protected land = 6	
	Residential Development Pressure Zone – Hot Spot Map of Number of Houses Built Between 2002 and 2019. Measures distance of a parcel from a pressure zone since 2002. Reflects the amount of development occurring around farms.	Within ½ mile of protected land = 4	
		25 Max Points	
		< ½ mile or within pressure zone 1 – 5 or pressure zone 2 – 3.	
> ½ mile ≤ 1-mile Zone 1 – 15 or zone 2 - 9			
	> 1 mile of zone 1 – 25 or zone 2 - 15		
Farm's Protection of Natural Resources			.10
	Percentage of Parcel has a 'far above average' or 'above average' climate resiliency value	20 Points	
		>75% of parcel= 10	
		50-75% of parcel=8	
		20-50% of parcel=2	
	Parcel (of Farm Unit) has a mapped surface water body	20	
	Parcel (or Farm Unit) has a DEC regulated wetland	20	
	Parcel (or Farm Unit) has a mapped FIRM Flood zone	20	
	Parcel has Ecological Importance with an Ecological Community within it as Identified by NYS Natural Heritage Program	10	
	Parcel (or Farm Unit) has rare plant or animals there	10	

Example of the Priority Farmland Rating System

A parcel has the following:

Soil Group: 100% of its area is in mineral soil 1a group: 100 pts x .4 = **40**

Long Term Viability Group:

The parcel is > 30 acres: 30 pts

The parcel gets an ag assessment: 30 pts

Agriculture is its primary use: 25 pts

Total – 95 pts x .35 = **33.35**

Conversion Pressure Group:

Parcel has 500-1000' of road frontage: 4 pts

Parcel is > 1 mile from water and sewer: 15 pts

Parcel is > 1 mile of zone 2: 15 pts

Total – 34 pts x .15 = **5.1**

Farms Protection of Natural Resources Group:

50-75% of parcel is above average resiliency score: 8 pts

Has surface water on parcel: 20 pts

Parcel has habitats listed as important ecological community: 10 pts

Total – 38 pts x .10 = 3.8

This parcel's "Important Farmland" ranking score would be $40+33.25+5.1+3.8$ or 82.15, which would be mapped for that parcel. See Priority Farmland Map.

In summary, important farmlands have been identified (See Priority Farmland Map) as follows:

- Higher priority farmlands would be those parcels or farm units that receive the most points.
- More emphasis is placed on soils, followed by features that contribute to a farm's long-term viability, then conversion/development pressure. Natural resources on a farm are important but are weighted as less important than the other factors. The thought is that if a farm has significant environmental features, it is of higher priority than if it does not.
- The system prioritizes larger farms that get agricultural assessments, and where ag is the primary use of the land (rather than mixed with non-farm residential uses) – both of which indicate long term viability for the farm.
- Parcels having large road frontages, that are further away from water and sewer infrastructure (with a better chance at remaining a farm), closer to other conserved lands (better chance at creating a 'critical mass of preserved farmland), and closer to areas experiencing more conversion and residential building (more houses means more fragmentation and more chance for farm/non-farm adverse interactions) are other weighted factors.

Prioritization Results

The Priority Farmlands Map shows the results of the analysis. All farmed parcels in the County are included on the map. Each parcel is analyzed and scored using the criteria outlined in Table 1 and 2. As can be seen on the map, a small percent of farmed lands ranked in the lowest categories. There are 143 out of 2,474 (5.8%) farmed parcels that rank very low. These parcels are scattered in different places throughout the County.

Table 3 details the acres and number of parcels for each ranking score. Large areas of higher rated farmland parcels can be found throughout the lower portion of the County. Towns with significant areas of moderate to high ranking farmlands include Newport, Fairfield, Schuyler, and Stark. Other towns having much of their land base ranked high include Manheim, Danube, Warren, Columbia, Litchfield and Windfield. Smaller and more fragmented areas of important farmlands exist in other towns and can be found in Frankfort, Herkimer, German Flatts, Salisbury, Norway, and Russia. Northern Herkimer County does not have farmland parcels except for a large parcel used for agri-forestry in the Town of Webb.

Table 3: Acres and Parcels by Ranking Score

Ranking Score	Number of Parcels	Number of Acres
0.00 – 13.25	143	4,948
13.26 – 32.91	179	39,040
32.92 – 41.12	544	32,113
41.13 – 48.01	633	42,023
48.02 – 55.42	631	53,654
55.43 – 71.97	344	32,833

Detailed Recommended Strategies

This Plan identifies specific strategies to help Herkimer County reach its agricultural vision and goals. These recommendations form a work plan that can be followed by the County and its public/private partners over time to facilitate positive change.

The recommendations are organized into three major categories:

1. Build capacity.
2. Enhance participation in and take advantage of existing programs already designed to benefit farms, farmers, and the agricultural economy.
3. Initiate new programs not currently being implemented in the County.

Long-term success in implementing this Plan will depend on a county-wide commitment to agriculture, having strong farm-related agencies in the County, and sustaining support for an aggressive effort to develop agricultural economic development plans and activities here. That success can be measured by the number of farms and farmland acres maintained, new farms and farmers in the County, new ag-entrepreneurial business start-ups, positive changes in farm incomes, and increased farm production metrics.

Implementation of this plan will require strong collaboration between all levels and players in the local food system including farmers, processors, non-profit organizations, institutions, county agencies, and others. A key element for success will be building capacity and committing to an organizational structure in the County that allows for effective implementation of the recommended actions. A major first step for the County, therefore, is to create this network to build capacity to carry out the needed programs.

*Note, recommendations below with a **, indicate that it was one previously included in the 2002 version of the Herkimer County Agricultural and Farmland Protection Plan.

Other recommendations marked with a “priority” symbol means that this strategy has been identified as a priority project to be implemented.

priority

Recommended Strategies Category 1: Build Capacity to Implement this Plan

- A. Create “**Grow Herkimer County**” – a county-sponsored and endorsed agricultural enhancement initiative. This initiative, recommended to be formally established by resolution of the Herkimer County Legislature, should set County policy and direction to:

Priority

1. Implement this plan;
 2. Communicate the importance of the agricultural industry in Herkimer County;
 3. Ensure for proper networks, coordination, communication, and collaboration among all county agencies and county-supported agencies involved with agriculture to implement this plan;
 4. Expand funding and seek new methods for funding necessary programs;
 5. Identify existing agencies and public/private organizations in the County that have roles in supporting agriculture, including the Herkimer County CCE, IDA, and SWCD and the Oneida-Herkimer Planning Department, and clearly describe their roles in the implementation of this Plan through memoranda of agreement; and
 6. Promote regional cooperation to meet mutual agricultural objectives throughout the Mohawk Valley.
- B. Formally appoint an Agricultural Council to take on the primary leadership role in implementing this Plan. Such a council has already been established by the IDA. Akin to a “Food Council,” this group will be crucial to bring together all agencies and organizations to collaboratively work on initiating, funding, and carrying out the necessary programs with staff support. Through this Council, Herkimer County will identify priority projects and set an annual and five-year work plan. ✱
1. At a minimum, the Agricultural Council should include representatives of:
 - Cornell Cooperative Extension of Herkimer County (CCE)
 - Herkimer County Industrial Development Agency (IDA)
 - Herkimer County Soil and Water Conservation Board (SWCB)
 - Herkimer County Agriculture and Farmland Protection Board
 - Herkimer County Farm Bureau
 - Herkimer County Legislature
 - Herkimer County Chamber of Commerce
 - Oneida/Herkimer County Planning Department
 - Farmers
 - Ag-producers
 - National Resource Conservation Service (NRCS)

- Farm Service Agency (FSA)
 - United States Department of Agriculture (USDA)
 - FarmNet
 - Other stakeholders identified in this Plan may be appointed to the Agricultural Council as needed.
2. The Agricultural Council will be responsible for determining project priorities, assigning specific tasks to different agencies/organizations represented on the Council, seeking funding, and other tasks but will need a staff person to coordinate, provide day to day direction, and serve as the “boots on the ground” to get the work done (see sample job description Part 2, Appendix G). To accomplish this, an agricultural economic development specialist position will be created by the IDA. * **priority**
- C. Maintain County support for Herkimer County CCE, IDA, and SWCD and enhance their capacity to effectively address the issues and programmatic needs identified in this Plan. These agencies are critical to assist in implementing various aspects of this Plan and the County should build on their organizational strengths, and expertise. *
- D. Aggressively pursue state, federal, and other outside funding sources identified in this Plan to support agricultural enhancement in the County. *
1. In addition to grants, establish alternate sources of funding for ag economic development programs.
- One example is to create a secondary funding source modeled after the Vermont Farm Fund, which uses donations to help farmers grow their business through investments in infrastructure and equipment. The fund should provide no hassle, friendly-term loans for local farmers and act as an ag-specific revolving loan fund. A donation program such as this can augment but is not likely to fully fund needed initiatives. When used for farmland preservation efforts, such a fund could assist farmers with costs associated with grant writing, real estate appraisals, or legal costs related to developing conservation easements.
- E. Expand regional programming, especially related to agri-tourism and other topics whose scale would be more efficient and feasible at the regional level. Herkimer County should seek to form beneficial regional programs where needed. Some of the needed programs may be difficult for Herkimer County to implement alone and the County should explore additional ways they can effectively share more programming with Oneida County and others in the Mohawk Valley (or North Country for northern Herkimer projects). Ensure all regional relationships are based on formal memoranda of understanding to ensure Herkimer County gets their agreed upon share of the services. *

Consider creating a program modeled after the Center for an Agricultural Economy in Vermont (hardwickagriculture.org). This Center offers:

- Forms and resources
- Farm and food business advising
- Shared use commercial kitchen
- Farm to institution supply chain
- Vermont Farm Fund
- Vermont Equipment Access Program
- Place-based education
- Food access and equity programs
- Community green space

- F. Widely disseminate and promote this Plan to the general public, elected officials and farm-related stakeholders to increase awareness and understanding of agriculture in the County. A comprehensive website, linked to the County, CCE, IDA, SWCD and other related websites, would be an efficient way to accomplish wider dissemination of this Plan.
- G. Identify all private and public partners in the existing local food system (see Box 1), including locally grown food products and value-added products. This inventory could result in a list of partners to collaborate and communicate with to advance local foods and shorten the local processing supply chain. It can also be used to identify gaps in the local food system that would become new opportunities. This database is important to both efficiently market local foods to retailers and consumers, and to identify opportunities for farmers. The County should promote local food and local food systems as a method to revitalize the broader community.
 - 1. Look into the USDA's Regional Food System Partnerships for funding support (See Part 2, Appendix G).

Recommended Strategies Category 2: Strengthen Participation in and Take Advantage of Existing Programs, Agencies, and Funding Sources

A. Strengthen farmer participation in:

- 1. NYS Agricultural Districts. In 2019, there was a large increase in the number of farmland owners seeking participation in the New York State Agricultural Districts program (30 applications). Currently only 33% of farmed parcels in the County are within a NYS certified Agricultural District (54,430 acres). There are 813 farmed parcels in the Herkimer County Agricultural District (#1) and 1,657 that are not (Herkimer County NYS Certified Agricultural District #1 Map). Even with an increase, there are still opportunities for more farmland owners to participate. This is especially true in Manheim. Participation in this program should be supported since Agricultural Districts can protect farms from nuisance lawsuits, eminent domain, and local regulations that interfere with farming. During each district's eight-year review, the AFPB should work to identify active farmlands that are not currently in an agricultural district and target efforts to reach those landowners and educate them about the benefits of being in an ag district. *
- 2. NYS Tax Assessment Programs. Continue to increase participation in the NYS Agricultural Assessment and the 480-a forest management program (See Farmed Parcels – Property Class 912 – Forest Lands Participation. There are currently 1,379 parcels that receive agricultural assessments (54,430 acres) and 20 parcels (33,000 acres) enrolled in the 480-a forestry program in the County. Both programs reduce property taxes. The 480-a program reduces property taxes for farm woodlands that are managed with forest management plans meeting NYS criteria. This program is especially important for Northern Herkimer County forestland owners. Participation in this program would encourage maintenance of woodlands for timber purposes and other forest values such as maple syrup production and would serve to reduce costs for owning this land. *

3. Training Assessors Related to NYS Agricultural Districts Law. Advocate that local assessors be fully trained in the New York State Agricultural Districts Law 25-AA and that farmers are fully informed of those benefits to reduce taxes. Promote consistency among assessors in use of agricultural classification codes. Further, when land is taken out of production, local assessors should aggressively enforce the required tax abatement rollbacks (penalties for farmland conversion to non-farm use).
 4. Expanding Understanding of Tax Benefits for Farmers. Develop a short, concise directory of tax incentives and benefits for farmers and farmland owners to help in promoting participation in these beneficial programs and place this on the County website.
- B. Local farmers and farmland owners should be educated about other tax abatement programs including the following: the farm building exemption portion of the Real Property Tax Law; Section 483; NYS Farmers School Tax Credit; NYS Historic Barn Credit Program; and the NYS Barn Rehabilitation Cost Share Program.
- C. There are many existing agricultural enhancement programs available that would benefit Herkimer County farms and its agricultural economy. Currently, many existing programs are either not being implemented at all in the County, or participation in them has been minimal. Herkimer County should take advantage of these existing programs to increase the available agricultural enhancement 'toolbox'. The County, under the leadership of the Agricultural Council together with CCE, should participate in, work to raise awareness of, and increase farmer and agri-business involvement in the following existing programs:
1. The Ag Navigator program (from American Farmland Trust). This holds a very important role in helping direct farmers and farmland owners to the appropriate resources they need to enhance their businesses. CCE in Herkimer County serves as our Agricultural Navigator. This is a critical program as local expertise is needed to aid farmers as they navigate local, state or federal rules, and in helping point farmers and food-related businesses to appropriate services, funding, technology information, and resources. This is particularly important related to farm labor issues and NY labor laws, packaging and labeling rules, and environmental regulations. To support this, the County should develop a website for all farm-related programs and opportunities in the County. A key post for this website would be to:
 - o Develop an updated web-based directory of programs and resources for farmers. This effort should be based on taking the directory created for the 2002 Agricultural and Farmland Protection Plan and updating it so it is useable online.
 2. NYS Department of Agriculture & Markets' New York Grown and Certified program.
 - o Improve participation in and expand support for farmers in the NYS Grown and Certified program. This is an important marketing opportunity and staff/expertise is needed to assist farmers get certified. CCE in Herkimer works with Oneida County on this program, but there is low participation in Herkimer County.
 3. Center for Agricultural Development and Entrepreneurship (CADE). CADE and some programs through SUNY Cobleskill offer one on one economic-oriented assistance to farmers. Other CADE

programs including the Mohawk Valley Farm and Food Business Incubator at SUNY Cobleskill and the Dairy Farm Support Program addresses value-added milk products and regional branding and can serve to enhance the dairy industry in the County. <https://www.cobleskill.edu/institute/ongoing-projects.aspx>

4. NY FarmNet (<https://www.nyfarmnet.org/>). FarmNet offers education and tools to help farmers, but especially to help them plan for their farm transfer. This is critically important to dairy farmers. ✱
5. Taste of New York program (<https://taste.ny.gov/form/taste-ny-participation-form>).
 - Work with farmers to help them take advantage of the Taste of NY store(s) at the Indian Castle Service Area, Iroquois Service Area, and at the Mohawk Valley Welcome Center.
6. Baskets to Pallets Project. Cornell University's Baskets to Pallets project, which provides educational resources and trainings to help farmers reach new markets. (<https://smallfarms.cornell.edu/projects/baskets-to-pallets/>)
7. Forestry and wood product programs, especially for northern Herkimer County. ✱
 - New York Wood Products Development Council programs. There are 6 Herkimer County businesses in the Council's business directory; one is a wood pellet producer and two are wood furniture manufacturers. The Wood Council has resources for market assistance, for forest owners, logger training programs, a business directory, and a forestry camp for youth.
 - The NY Grown and Certified program has been expanded to include firewood, and producers in the County would benefit from participating in this marketing and branding program. An effort to outreach with this program to forestry and forest product producers in the northern part of the County is needed.
 - Cornell CCE agroforestry programs. CCE in Herkimer County is working with forest owners in the Old Forge area to introduce agroforestry programs. Any forest products that could be produced within the blue line would automatically command a premium during the tourist season at markets and stores. Continue work to expand this program. (<https://smallfarms.cornell.edu/projects/agroforestry/>)
8. Existing ag-tourism events including the Garlic Festival, Cheese Festival, scenic byways, and ag-trails. These successful ag-tourism events are critical programs to continue to make connections between growers, consumers, and tourism in Herkimer County. The County should continue work on supporting and enhancing these important events. Take more advantage of the County's location along the Revolutionary Trail, the Southern Adirondack Trail and scenic byways to link farms, agri-tourism and these already-marketed venues. Work with Oneida County to expand the "Heart of NY Craft Beverage Trail into Herkimer County."
 - In addition to farm tours, and more direct sales, the County needs to concentrate on tourism infrastructure (lodging, marketing, broadband) and training/assistance to help individual farms prepare themselves for farm visitors. Recognize that developing ag tourism is an important part of farm diversification. These are important farm and economic development programs and should be elevated as a priority in the County.

- Work with other organizations such as the Chamber of Commerce and consider initiating an Agri-Tourism Matching Advertising Partnership Program. This program could extend advertising resources for promotion through a reimbursable match program. For example, the program could pay 75% of advertising costs if the actual costs are < \$7500 cost; or pays 50% for > \$10,000.

Agritourism Defined

There is no universally-accepted definition of agritourism; most combine elements of tourism with elements of agriculture. Below are a few examples:

- “Any business activity that brings the public to a farm/rural setting in an effort to market farm-raised or -produced products or the enjoyment of related outdoor activities”
- “Farming-related activities offered on a working farm or other agricultural setting for entertainment or educational purposes”
- “An activity, enterprise or business that combines primary elements and characteristics of agriculture and tourism and provides an experience for visitors that stimulates economic activity and impacts both farm and community income.”

9. USDA Dairy Business Innovation Initiative (See Part 2, Appendix G). On behalf of the County, CCE is an eligible grant applicant and could work regionally with other extension offices to develop a grant application to further promote the dairy industry.
10. Herkimer County Local Food Map. ✱ Expand efforts related to include:
 - Working with farmers listed on the food map to better prepare them for direct sales and/or visitors to their farm.
 - Making the existing local food map interactive through a website and app for phones.
11. Regional Cooperative Extension Programs. The regional extension dairy, field crops, farm business and livestock programs. Continue these regional programs as they are crucial to continue to focus support of regional dairy farms.
12. The Sustainable Agricultural Research and Education Northeast program (SARE). This is a federally funded program that offers grants and education to advance innovations in sustainable agriculture. The Northeast program covers New York and is housed at the University of Vermont. They offer farmer grants, partnership grants, graduate student grants, research and education grants, grants for novel approaches to agriculture, and professional development grants. Our state coordinator for the program is housed at Cornell University. See Part 2, Appendix I for a listing of SARE programs in NY.
13. The NYSERDA Agricultural Energy Audit program. Promote the services of this program as it assists farm owners to reduce farm operation energy costs. ✱
14. The Mohawk Valley Small Business Development Center (which serves Herkimer, Madison, Montgomery, and Oneida Counties). Enlist more services from this existing effort to assist farmers with business planning.

15. The US EPA Local Foods, Local Places program. This program has opportunities for Herkimer County's participation to promote more local food development. Malone, NY was a 2019 partner community, Cortland was in 2018, Jamestown, Greenwich, Keeseville, and Canton are all other participants since program initiation in 2015. This will entail researching and applying to the program (<https://www.epa.gov/smartgrowth/local-foods-local-places>)
16. The Young Farmers Coalition (a chapter exists in Cooperstown with a 50-mile service radius). Work closely with this group to expand opportunities for new, young ag-entrepreneurs and farmers.
17. Herkimer County Industrial Development Agency (IDA) Programs. IDA efforts to promote local products with the Oneida Nation.
18. Food Export Northeast. Food Export Northeast, a state and regional trade group that assists companies with export promotion. Work closely with this trade group as a variety of wood products are eligible for participation through the group's brand program. This program provides 40-50% cost reimbursement, between \$5,000 and \$250,000, for businesses for a variety of international marketing activities including:
 - International website development
 - Package and label modifications
 - Advertising
 - In-store promotions and product demonstrations
 - Fees for exhibiting at some overseas trade shows and selected trade shows held in the U.S.
 - Public relations
 - Marketing and point-of-sale materials
 - Freight cost for samples
19. Federal Private Investment Programs. Existing federal programs, such as New Market Tax Credits, Opportunity Zones (that promote private investment in low income communities). These programs are for interested investors and Herkimer County IDA and/or Empire State Development could be involved in attracting private investment through these opportunities.
20. The USDA Value Added Producer Grants (USDA Rural Development).
21. Herkimer County Farm Bureau. Work with the Herkimer County and New York State Farm Bureaus to enhance agriculturally related legislation at the local, state and federal levels.
22. Farm Link Programs. Existing farm link programs such as the Farmland for a New Generation program or create a new Mohawk Valley farmland network program that connects new farmers and older farming generations to help new people get into farming. There currently is no active farm link program specifically in the Mohawk Valley. See Hudson Valley Farmland Finder (hudsonvalleyfarmlandfinder.org) as an example of what can be accomplished here. and Farmland for a New Generation New York (<https://farmland.org/project/bringing-a-new-generation-of-farmers-on-the-land-in-new-york/>)

- o Participate in Farmland for a New Generation (a program of the American Farmland Trust in partnership with New York State). It helps farmers seeking land and landowners wanting to keep their land in farming connect. Herkimer County is now the designated regional navigator for this program (in the ‘unfunded’) category. This is a very important program and new sources of funding should be explored to move CCE into the ‘funded’ category to fully utilize this program.

Recommended Strategy Category 3: Initiate New Programs

Topic 1: Diversity, Sustainability, Resiliency, Diversification, Profitability

There is a need to enhance capability in the County to provide expertise to farmers and processors related to diversification, sustainability, and profitability topics – all of which are needed to enhance the farm economy in the County. Encourage new programs that identify alternative crops and value-added products that can be successfully grown in Herkimer County. Adequate information is needed to guide farmers on viable crops, products, and markets they can take advantage of. Identification of local goods needed but not yet available in the County can also help to fill local food needs and help farmers take advantage of those opportunities.

Generally, CCE, SWCD, and IDA and other private/public partners should work together to address:

- o Diversification and farm transition into:
 - ✓Vegetable and other produce, greenhouse, and organic products
 - ✓Dairy beef and other meat products as year-round products
 - ✓Industrial hemp, and if legalized, marijuana growing and processing
 - ✓Pasture dairy operations that take advantage of grass and grazing opportunities in the County
 - ✓Promote small grain, hop, winery, cidery, and microbreweries
 - ✓Cheese making
 - ✓Value-added farming
 - ✓Value-added processing and organic food processing.
- o Direct sales and agritourism
- o Online Sales
- o Business planning
- o Niche markets, especially artisan cheese
- o Sales to retail grocers and supermarkets

To address these needs, there will need to be enhanced provision of technical assistance, education, and support. There is a need and opportunity in the County to transition farming from an emphasis on dairy to mixed-use agriculture. While this does not preclude continuing strong dairy programs in the County, there should be more emphasis on promoting and supporting many different types of farm activities.

The following new initiatives, if implemented in Herkimer County, could enhance the agricultural economy and increase individual farm profitability over time (not in any kind of priority order):

- A. Support creation and funding of a Certified Nutrient Management Planner with Herkimer County Soil and Water Conservation District. This is increasingly important to assist farms of all sizes manage manure and other soil nutrient issues. This will become increasingly important in the face of changing weather patterns.
- B. Supplement existing farm economic support services (such as through IDA, CADE and SUNY Cobleskill) by creating an organization modeled after the Hudson Valley Agricultural Economic Development Corporation as a private or public/private endeavor to provide more one-on-one technical agricultural economic development assistance for the Mohawk Valley. This could be a regional program, like the Hudson Valley program. (<https://www.hvadc.org/>)
- C. Examine the feasibility of creating a new tax abatement incentive for value-added farm enterprises or for offering a beginning farmer tax credit that could be given to farmers who sell or rent their farmland to beginning farmers.
- D. Improve high-speed internet/broadband services throughout the county, but especially in the areas where most farms are concentrated in the Mohawk Valley. High speed internet is critical to promote existing farm operations and new start ups. Consider funding sources from the USDA Broadband ReConnect Program.
- E. Create an online purchasing website that local farms and value-added agri-businesses can use and market their products. A good model is the Schoharie Fresh online market (www.schohariefresh.com).
- F. Develop an effective agricultural plastics recycling program. This would be most effective as a regional program.
- G. Interview County and Town highway departments to identify road use/bridge use/issues and uniform methods to address them. Little work has been done related to the safe movement of agricultural equipment on local and county roads in Herkimer County. There is a lack of enough data and detail to understand where and what the issues and solutions are. As farms increase in size, so will equipment, and there are likely to be increased road conflicts with other vehicles as development takes place in the County. Wide machinery can also be an issue when crossing bridges or working around utility poles and road signs. An expanding presence of horse-drawn buggies and implements in the County can also be an impact. The county should examine use of agricultural equipment on roads and involve local highway superintendents, farmers, and non-agricultural uses. This effort should result in a set of recommendations that could be implemented at the County and town level. A part of this effort should be promoting more understanding about slow moving farm equipment on the road.
- H. Initiate and promote a Farm to Institution program. This should include:
 - 1. NY Farm to School program. This is a state program created to connect schools with local farms and food producers to strengthen local agriculture, improve student health, and promote regional food systems awareness. (<https://agriculture.ny.gov/farming/farm-school>). There are

currently few school districts in Herkimer County participating. In many counties, this program is coordinated from their CCE office. Consider working with the Herkimer HealthNet to promote farm to school programs. (Herkimer HealthNet is a 501(c)(3) nonprofit organization working to improve health and nutrition in the County.

NYS provides financial incentives to schools to purchase more local ag products. See <http://www.cn.nysed.gov/content/additional-state-subsidy-purchasing-new-york-state-food-products?platform=hootsuite>. (Many resources on the Farm to School program are at <https://agriculture.ny.gov/farming/farm-school>.)

2. Other farm to institution opportunities exist by partnering farmers with Herkimer College, the Herkimer County Correctional Facility and others. It is unlikely that Herkimer County farmers could fulfill a lot of institution needs until more produce farmers enter the market, so successful implementation likely will need to be a regional program to move local produce to institutional markets. Farm to institution programs involve aggregating and processing. All farm to institution efforts will advance farm viability, promote new farm opportunities, and increase food accessibility and could be an essential part of the local food system. This program will necessitate identification of institutional needs compared to local and regional products that are available, and collaboration with commercial kitchens, distribution hub(s), existing food distributors, and other processors. (See recommendation L, below for food hub.)
 - I. Explore the feasibility of developing new small grain storage and handling facilities.
 - J. To ensure long-term resiliency in the face of changing weather patterns, technical and educational tools should be available to assist farmers identify and incorporate resiliency practices. SWCD and CCE should take lead roles in helping farmers build healthy soils through conservation tillage and contour ploughing, diversification of crops, use of cover crops, no-till, composting, reintegrating crops and livestock and whole-farm planning. Full support of the AEM framework through SWCD is recommended as well. Other tools are available through use of the NRCS Practice Standards for Greenhouse Gas Emission Reduction and Carbon Sequestration. The County should promote and encourage participation in the New York State Department of Agriculture and Markets Climate Resilient Farming Program that has grant funds awarded through the SWCD on behalf of farmers for projects that mitigate greenhouse gases as well as to enhance on-farm adaptation and resiliency to projected climate conditions. Grant funds are available for ag waste storage cover and flares for methane reduction, on-farm water management, and soil health systems.
 - K. Promote high tunnels and other innovative methods to expand the growing season for farmers in the County. The NRCS/USDA offers programs for these activities.
 - L. Promote more grass-based farming for livestock and poultry.
 - M. Promote mobile food vending through food trucks. These are ag-business opportunities that have low start up costs, can utilize local foods, and can set up in unique locations in the County (such as Old Forge and other places in the northern part of the County).

- N. Create a program that brings dairy farmers together to market cull cows collectively.
- O. Create a revolving loan fund oriented to loans or microloans for value-added, small farm, niche operation, or start-up farming operations. Because ag projects don't often create the jobs that more conventional funding sources require, establishing a new and specific loan fund for agricultural projects is important. Such a fund would need non-federal sources or donations that would allow for smaller loans of \$5,000 to \$30,000 to farmers who want to diversify, transition or expand their operations. The State has an agricultural loan fund that does not have the job creation requirements
- P. Work closely with Mohawk Valley Regional Economic Development Council (REDC) to promote programs that support microenterprises related to agriculture, food-processing, capital for working small farm start ups, and marketing. Currently their programming does not emphasize these needs.
- Q. Provide grant assistance to farmers. This includes maintaining expertise in the County on grant opportunities, eligibility, and grant writing and should be tasks integrated into the responsibilities of the agricultural economic development specialist recommended to be hired.

Topic 2: Use Infrastructure to Enhance Food Processing Opportunities

- A. Use the excellent transportation connections and public water and sewer infrastructure available in the County to accomplish many of the food aggregation and processing ideas recommended in Topic 1 including a food hub, meat processing, commercial kitchen, and other food processing. The County should identify feasible locations for these facilities, work with landowners, and develop plans to promote and support development of food processing at these locations. Other food processing that could benefit from the County's infrastructure include a test creamery, local food business incubator, local dairy processing, food storage, and other food preparation. Take advantage of the water and sewer infrastructure expansion in the Town of Manheim being supported by the IDA. Once in place, that will be a prime location for food processing activities.

Vermont Food Venture Center

As an excellent model, see Vermont Food Venture Center (VFVC), a shared use food hub and business incubator in Hardwick, VT. VFVC offers 3 state-of-the-art, shared-use commercial kitchens for rent to food entrepreneurs, farmers, and community groups, equipped with ovens and stove tops, food processors, steam kettles, fillers, blenders, mixers, peelers and more. VFVC supports job creation, strengthens Vermont's value-added food businesses, creates opportunities for farmers, and further integrates the agricultural economy into the community and the state of Vermont.

- B. Explore ways to take more advantage of the Amish Produce Auction in Minden/Fort Plain. This serves as a local food hub for the Amish and is an unexplored resource that could be expanded.
- C. Continue supporting plans for a protein processing plant.
- D. Develop a food hub to further market and distribute local foods. Expand ag-related processing and distribution infrastructure to increase capability. Focus on locations suitable to take advantage of

existing transportation and water/sewer infrastructure such as with easy access to the Thruway or in Manheim where infrastructure capacity exists or will exist.


Processing should include consideration of ways to optimize convenience – convenience in both location and access and in convenience in use and packaging. A food hub could serve several purposes including a central retail market for ag products, distribution center, commercial kitchen, and processing center. It should be a multi-component aggregation and distribution facility that addresses both retail sales and wholesale distribution.

The food hub should be in an accessible place for processors and other local food related businesses to reach and use. This could be a central location for Community Supported Agriculture operations (CSA's) or those participating in an online market to use as a drop off/pick up location too.

Consider distribution and marketing programs that increase access to local foods in the northern part of the county as an integral part of the program. Recognize that northern Herkimer County has limited agriculture as well as limited local food opportunities and many consider it to be a 'food desert'. A food hub serving northern Herkimer County, at least during the summer tourist season, may be the most advantageous place to initiate such a facility. The Regional Access organization (<http://regionalaccess.net/>) out of Ithaca would be a great addition to the food choices in the Old Forge area.


The food hub would be important to support a farm to institution program through the packaging of local foods. There is an opportunity for small scale processing oriented to creating convenience foods for direct sales (e.g., pre-cut vegetables).

Topic 3: Promotion and Marketing of Agriculture

- A. Develop a strategic and multi-pronged public relations and marketing plan. Consider  requesting New York State Consolidated Funding Application (CFA) funds or a SAM (State and Municipal) facility grant to fund this initiative. This effort should result in tangible products such as logos, brands, marketing and promotion tasks, and prepared text, press releases, and advertisements. It should also establish the role of different agencies/organizations and budgetary needs to implement the plan. * This marketing plan should specifically address:
1. Promotion of buy local and access to local foods both direct to consumer and to other retailers/restaurants.
 2. Outreach to elected officials. A Legislators Initiative (legislators, supervisors, State and Federal elected officials) to increase understanding about the role of agriculture in the County.
 3. Conveying to the general public the positive role agriculture has to Herkimer's economy and way of life. Identify potential events and activities that expand the understanding of agriculture with the general public.

4. A local branding program that works with farmers and local retailers/restaurants to create signage and logos to identify local foods. Create a logo for the **Grow Herkimer County** program.
 5. Recommendations for new or expanded farm-related events. Considering starting a farm visit day (or two) for the general public like Otsego, Schoharie and Madison county programs. Consider an Oneida-Herkimer combined farm visit event.
 6. Design and create text for enhancing the presence of agriculture and agricultural programs and resources on the County website. As a major component of economic development, agriculture should have a bigger online presence attached to the County. A one stop shop is needed. Identify ways to link the County website to IDA, SWCD and CCE websites to further populate 'resources' related to agriculture in the County. Develop web pages with existing and updated information.
 7. Identify ways farmers and other agencies such as CCE Herkimer County can address lack of marketing experience and difficulty marketing products.
- B. Develop programs to promote local food products:
1. Work with Hannaford, Price Chopper and other similar stores to market local ag products with better signage that promotes local foods.
 2. Coordinate local food tastings with restaurants, Herkimer College, schools and other institutions to demonstrate the quality of local food.
 3. Rotate local food/farmers markets demonstrations throughout the county.
 4. Partner with Chamber of Commerce and other similar organizations for local food publicity campaigns.
- C. Promote one person at each school to be an ag champion to foster an understanding about agriculture with teachers, administrators, students and parents.

Topic 4: Enhance Agricultural Education

Continue to support school programs and CCE educational initiatives to increase the number of new farmers in Herkimer County. 

- A. Inventory what other school ag programs are doing such as the Hamilton High School Farmer Gift Box program, or the Schoharie Central School FFA Farmer Recognition Meal and promote innovative High School programs that promote agriculture.
- B. Have Herkimer County Agriculture and Food System training for teachers, administrators and guidance counselors.
- C. Get farmers, especially FFA alumni involved in school, FFA, 4-H and other ag-education programs.
- D. Bring students to the Herkimer County Fair via FFA booths to talk to the public about agriculture in the County.
- E. Create an annual forum focusing on the role of agriculture in the County and invite all 11 superintendents.
- F. Support grants for more ag education for schools. Build partnerships and support schools to seek more state grants to promote ag education.
- G. Invite educators to the farm progress show. Ensure members of each Board of Education is there to see and learn. Personal invitations and outreach are needed to accomplish this.
- H. Establish a program that could sponsor one or more students to attend the NYS FFA Convention. A funding initiative, especially with FFA alumni could help fund this scholarship. An alternative would be to initiate a crowd source program to fund small grants specifically for youth agricultural education.
- I. Initiate a youth and young farmer mentoring program. This was an initiative highly supported by the farm community. A mentoring program could support a new generation prepared to contribute to innovative and sustainable agriculture in the County. This mentoring program should focus on helping young people grow a business-oriented mindset about agriculture and understand the many technologies and career opportunities related to agriculture. Mentoring programs could be face-to-face or virtual using technology. The programs should work with 4-H and FFA, as well as Herkimer College and SUNY Cobleskill. At the high school level, combining an intern/mentor program with the FFA Membership Essay could be effective.
- J. Advocate for elected officials at all levels of government to have more interaction with the ag producers and processors in the County.
- K. Start a beginning farmer program. Use the many resources provided by the NYS Department of Agriculture and Markets, CCE, USDA, Young Farmers Coalition, and others to effectively use existing

information and program to support new farmers. For example, the NYS Department of Agriculture and Markets guidebook entitled ‘Resources for New Farmers’ should be easily available through County and CCE website and used in programming.

- L. Organize area farmers to participate in and have a presence at career fairs held for high school and Herkimer College students.
- M. Promote formation of local municipal agricultural advisory committees to be resources to planning boards, town boards, and residents. Towns should work towards and farmers should accept appointments as agricultural members on planning board and zoning boards of appeals as authorized per New York State Town law.
- N. Promote School Gardens (resources include the Microfarm manual, Center for Ecoliteracy, Food Corps programs). This program can work to instill in students, faculty and parents how food is grown and the importance of fresh, healthy food.

Topic 5: Protect Farmland

Quality, productive farmland should be protected for agricultural uses and crops.

- A. Develop a model solar regulation law suitable for Herkimer County towns that includes language that directs solar facilities away from critical farmlands. Use the Priority Farmland Map included in this plan to identify those critical farmlands.
 - 1. To further aid in protecting farmlands during solar development, conduct a county-wide analysis showing places that are suitable and desirable for solar development. A GIS analysis could be done to show the location of potentially suitable lands for solar development based on criteria developed such as proximity to three-phase power, slope, environmental features, viewsheds, size of parcel, and agricultural land uses. As part of this analysis, use the farmland ranking scores developed in this Plan to identify important farmlands.
 - 2. Offer training for farmers and municipalities on solar/solar land leases.
- B. Establish a farmland preservation program that expands use of voluntary conservation easements to protect farmland: ✱
 - 1. Provide education to farmers about New York State farmland preservation programs.
 - 2. Use the Priority Farmland Areas map included in this Plan to advance and focus farmland protection efforts. The map will allow the County and towns to work with landowners interested in protecting their working farmland for the future should funds become available to permanently protect farmland, whether through the purchase of development rights, term easements, the transfer of development rights, or other means. The prioritization is not a definitive or final determination but informs and guides where attention should be directed for conservation efforts. This map is not necessarily a ‘blueprint’ but a data-driven planning effort

that will inform ongoing conservation assessments by New York State and local organizations. Ultimately, the objective should be to allocate limited funds that may be available for farmland protection among a set of sites to yield the greatest possible farmland value.

3. Develop a working relationship with the Otsego Land Trust or other land trusts that operate in Herkimer County (such as the American Farmland Trust) to assist in the arrangement and management of conservation easements to protect farmland. If Otsego Land Trust is unable to expand effectively into Herkimer County, consider working to establish a Herkimer County Land Trust.
 - o Develop information on conservation easement values. This is a critical base of knowledge farmland owners need prior to evaluating whether they want to participate or not in a farmland preservation program. Since little information exists now that provides data on the value of conservation easements in Herkimer County, the Otsego Land Trust or another land trust could apply to the New York State Department of Agriculture and Markets for grant funding of farmland value appraisals. These appraisals would provide a baseline of information to inform landowners about the economic value of easements in Herkimer County.
 - o Land trusts working to preserve farmland in Herkimer County should explore incorporating a variety of methods that effectively keep farmland available for future farming. These methods include:
 1. Option to Purchase at Agricultural Value (OPAV): helps the land trust keep farmland affordable for farmers by ensuring that it is priced and sold according to its agricultural value, rather than for its value as a rural estate.
 2. Buy-protect-sell Option: The land trust will buy a farm, conserve it with an OPAV easement, and sell it at a more affordable value to a farmer selected through an RFP process.
 3. Simultaneous easement purchases: Purchase an OPAV easement on a farm at the same time a farmer is purchasing the land in order to make the farm affordable.
 4. The County and local towns should support farmer applications when these landowners seek to participate in the NYS farmland preservation program. Participation in these programs is always voluntary.
- C. Increase adoption of right-to-farm laws at the local and county level.
1. Herkimer County should adopt a county Right to Farm law (See Part 2, Appendix J for a Model Law). Although farms located in a New York State certified agricultural district would benefit from the protections of the State's right to farm law, there are many farms in Herkimer County that are not in a state-certified agricultural district and therefore have none of those protections. Adopting a county level right to farm law also sends the important message that farmers and farm operations are important. A county level right to farm law should include language to establish a mechanism to address and resolve conflicts that arise related to agriculture.
 - o When adopted, create a right to farm education packet for landowners and officials.

2. The County can also promote municipal level right to farm laws to continue the support of farming at the local level. Surveys conducted as part of this plans public input process showed that many local officials believe a town right to farm law exists, when they do not. Establishment of a local right to farm law can send an important message to all that farms in that municipality are important.
- D. Identify and map underutilized lands and vacant farmlands. Explore opportunities and incentives to return these underutilized lands to production to meet an agricultural need or new market demand.
 - E. Work with Oneida County Department of Planning to share resources and/or develop its own tool kit or resource guide to help local communities understand their options for land use policies/plans or regulations that would help direct development to appropriate locations and protect farmlands. Oneida County has an initiative to provide this information and Herkimer should have similar resources for its farm landowners.
 - F. Provide information about purchase of development rights (permanent and term easements) to help farmland owners understand preservation options.
 - G. Provide model local laws that are agriculture-friendly and available so that local municipalities can adopt them easily. A 'bank' of model laws or language would be useful to promote agriculture-friendly planning in the County. It may be feasible to develop these models as an Oneida/Herkimer or a Mohawk Valley regional tool as some locations are already developing some model laws. Some of the topics that could be addressed in models that could benefit municipalities include:
 1. Conservation Subdivision Design
 2. Incentive Zoning (density bonus in exchange for preservation of agricultural resources)
 3. Definitions of ag-related terms
 4. Agricultural Overlay Districts
 5. Agricultural Buffers
 6. Agricultural Data Statements and Disclosure Notices (See Part 2, Appendix E)
 7. Solar Laws
 8. Farm Worker Housing
 9. Agri-tourism and short-term rentals on farms
 - H. Promote farm-related recreational opportunities that keeps land in farming such as horse-riding, equine operations, winter trail uses, etc.
 - I. Enhance Agricultural Environmental Management programs with local NRCS and SWCD resource staff.
 - J. Provide land use training for town planning boards, zoning boards, and code enforcement officers so they are familiar with agriculture, the NYS ag district law, and local land use options to promote farming and farmland uses.

1. Conduct a workshop specifically for the four towns that were included in the agriculture-friendly audit (See Part 2, Appendix D).
2. Conduct a workshop for all municipal boards, planning boards, ZBA, and others on agriculture-friendly techniques that could be put to work at the local level. Municipalities and their planning boards should be familiar with Article 25-aa of the NYS Agriculture and Markets Law, the ag data statement, the ag disclosure notice (Part 2, Appendix E), and how to analyze and review non-farm development projects and their impacts on adjacent agricultural operations. Any training or education effort should provide information/training on:
 - SEQR and evaluating impacts on agriculture
 - Lot size and density options to protect farmland
 - Agricultural zoning options.
 - Use of agricultural overlay districts to protect farmland.
 - Purchase of development rights programs
 - Use of conservation subdivision design for major subdivisions
 - Subdivision, site plan and special use permit improvements to promote projects to be consistent with farm operations
 - New York's Smart Growth law and concepts
 - Use of agricultural buffers when new non-farm development takes place
3. Promote comprehensive planning at the local level to use this plan in municipal land use planning.

Action Plan

How Can this Plan be Used?

The 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 and expand the agricultural economy in Herkimer County and to conserve important farmlands and landscapes.

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, agri-businesses, agri-tourism and local food systems in the County;
- Guidance on obtaining funding to implement actions recommended in the Plan; and
- A timetable for the County to implement recommendations.

There are two types of tasks that are needed to make this Plan a reality:

1. Implement steps that expand the capacity of and collaboration between farmers, processors, buyers, agricultural support agencies and government entities; and
2. Implement specific Priority Actions and programs that create value.

Who Needs to be Involved in Implementing This Plan?

Many individuals, agencies and organizations have important roles to play in implementing this plan. The County, under the leadership of the recommended Agricultural Council should take a lead role to implement the plan by providing policy, direction and leadership . There are many other important players that will also have significant roles from County agencies to local municipalities. Local municipalities can positively enhance Herkimer's farms by acting at the local level such as by using the information contained in this plan to enhance agriculture in their communities as they work on local comprehensive plans and land use regulations.

Specific agencies and groups have been identified as having leadership or technical skills needed to implement the strategies. Key players in implementing this plan will be the Agriculture and Farmland Protection Board, Oneida/Herkimer Planning Department, the proposed Agricultural Economic Development Specialist working with the Agricultural Council, Cornell Cooperative Extension in Herkimer County, the Herkimer County Soil and Water Conservation District, local staff for the NRCS, area Chambers of Commerce, Farm Bureau, the Industrial Development Agency (IDA), a land trust, Farm

Service Agency, other local organizations Garlic Festival and Cheese Trail organizers, and of course, individual farmers.

What Are Additional Potential Funding Sources for this Plan?

Success in protecting agricultural resources requires long-term support and funding at all levels. This Plan recognizes that the County can not financially support all programs. Outside funding support will be needed long-term. This funding can be supported through state and county grants and match programs as well as on non-traditional sources of funding and partnerships outlined in this Plan to implement programs. Funding support should be sought from the following (this is a partial list):

- New York State Department of Agricultural and Markets Grants
- Grants available from New York State through other Departments via the NY Grants Gateway
- SARE Grants
- USDA – Offers a variety of funding opportunities including:
 - Value Added Producer Grant
 - Rural Business Development Grant Program
 - Local Food Promotion Program Grant
 - Wood Innovation Grants
 - Local Foods, Local Places Grant
 - Sustainable Agriculture Research and Education Grant
 - Funding for Beginning Farmers
 - Conservation Funding
 - Grants and Cost-Shares
- USDA Telecommunications Loan and Grant Programs
 - Community Connect Grants
 - Rural Broadband Access Loan and Loan Guarantee
 - Telecommunications Infrastructure Loans and Guarantees
 - Distance Learning and Telemedicine Grants
 - E-Connectivity Pilot

First Implementation Steps

1. County Legislature to formalize the recommended Agricultural Council.
2. Agricultural Council to form and organize by setting an annual work plan. Outline specific projects to be accomplished and identify appropriate staff/organizations to take specific roles in each project. It is recommended that initial projects include developing a comprehensive marketing and promotion plan for agriculture and local products and establishing a young farmers/beginning farmers program.
3. Agricultural Council works to hire an Agricultural Economic Development Specialist (AED)
4. Work to develop a scope of work, task list and budget for the first programs and concentrate on seeking funding through NYS Agriculture and Markets, NYS Grants Gateway and other sources in the first year.

Implementation Checklist

The strategies and actions detailed in this Plan outline the full set of recommended ‘tools’ to enhance agriculture in Herkimer County. The table below offers additional details on those major actions that form the foundation for other, more targeted projects. The table offers additional details to guide those that will be implementing the Plan. Not every strategy identified above are included in the table and the table reflects the major initiatives. Initiatives highlighted in blue represent short-term actions that are considered priority projects to undertake within the first year after adoption of this Plan.

Some of the acronyms used in the following table are:

AED Specialist – the recommended Agricultural Economic Development Specialist

HOCCPP – Herkimer/Oneida Counties Comprehensive Plan Program

CCE – Cornell Cooperative Extension

Ag Council – the recommended Agricultural Council

SWCD – Soil and Water Conservation District

AFPB – Herkimer County Agricultural and Farmland Protection Board

IDA – Herkimer County Industrial Development Agency

FFA – Future Farmers of America programs at local school districts

NRCS – Natural Resources Conservation Service

Recommended Strategy and Action	Target Date ⁶	Project Lead	Other Partners	Potential Cost ⁷
Category 1: Build Capacity to Implement this Plan				
Create “ Grow Herkimer County ” – a county-sponsored and endorsed agricultural enhancement initiative.	ST	Legislature	IDA	Low
Create an <u>agricultural economic development specialist</u> position through the IDA.	ST	IDA	Legislature	High
Maintain County support for Herkimer County CCE, IDA, and SWCD and enhance their capacity to effectively address the issues and programmatic needs identified in this Plan.	ONGOING	Legislature	All Involved County Agencies	High
Aggressively pursue state, federal, and other outside funding sources identified in this Plan to support agricultural enhancement in the County.	ONGOING	Ag Council	AED Specialist	Part of Job Description
Expand regional programming, especially related to agri-tourism and other topics whose scale would be more efficient and feasible at the regional level.	MT	Ag Council	All Involved County Agencies and Organizations	High
Category 2: Strengthen Participation in and Take Advantage of Existing Programs, Agencies, and Funding Sources				
Strengthen and expand programs already existing in Herkimer County as outlined in this Plan:	ST TO MT			
NYS Agricultural Districts.		HC AFPB	HOCCPP SWCD	Low
NYS Tax Assessment Programs.		HC Real Property	CCE	Low

⁶ **Short Term (ST)** = To be accomplished in 2020; **Moderate Term (MT)** = To be accomplished between 2021 and 2025; **Long Term (LT)** = To be accomplished after 2025; **Ongoing** = Work that needs to be continual through the years.

⁷ Potential costs for implementing the actions in this Plan are identified as low, moderate, or high. These costs are not necessarily tax dollars from County but would require additional funding sources. In some cases, it is anticipated that costs can be defrayed by third parties through grants, volunteerism and private donations. **Low cost** (Low) actions require minimum or no expenditures to accomplish and are anticipated at less than \$15,000. **Moderate costs** (Mod) are those ranging from \$15,000 to \$35,000, and **high costs** (High) are those that are estimated to be more than \$35,000. The table below offers broad guidance on potential costs.

Recommended Strategy and Action	Target Date ⁶	Project Lead	Other Partners	Potential Cost ⁷
			SWCD	
Training Assessors Related to NYS Agricultural Districts Law.		HOCCPP	CCE	Low
Expanding Understanding of Tax Benefits for Farmers.		HC Real Property	CCE	Low
The Ag Navigator program (from American Farmland Trust).		CCE		Mod
Develop a website for all farm-related programs and opportunities in the County.		Legislature	Ag Council	Low
NYS Department of Agriculture & Markets' New York Grown and Certified program.		CCE	AED Specialist SWCD	Mod
Taste of New York program (https://taste.ny.gov/form/taste-ny-participation-form).		CCE	AED Specialist	Mod
Forestry and wood product programs, especially for northern Herkimer County.		CCE	AED Specialist	Mod
Garlic Festival, Cheese Festival and Other Events.		Existing organizing committees	Others as needed	Low
Expand efforts related to the Herkimer County Local Food Map and make it interactive via a website.	ST TO MT	CCE	Others as needed	Mod
Category 3: Initiate New Programs				
Topic 1: Diversity, Sustainability, Resiliency, Diversification, Profitability				
Support creation and funding of a soil management planner with Herkimer County Soil and Water Conservation District.	ST	SWCD	The County Legislature	High
Supplement existing farm economic support services (such as through IDA, CADE and SUNY Cobleskill) by creating an organization modeled after the Hudson Valley Agricultural Economic Development Corporation as a private or public/private endeavor to provide more one-on-one technical agricultural economic development assistance for the Mohawk Valley.	LT	Ag Council		High
Examine the feasibility of creating a new tax abatement incentive for value-added farm enterprises or for offering a beginning farmer tax credit that could be given to farmers who sell or rent their farmland to beginning farmers.	LT	Ag Council		Low

Recommended Strategy and Action	Target Date ⁶	Project Lead	Other Partners	Potential Cost ⁷
Create an online purchasing website that local farms and value-added agri-businesses can use and market their products. A good model is the Schoharie Fresh online market (www.schohariefresh.com).	MT	AED Specialist		Mod
Develop an effective agricultural plastics recycling program. This would be most effective as a regional program.	LT	AED Specialist	CCE SWCD	Mod
Interview County and Town highway departments to identify road use/bridge use/issues and uniform methods to address them.	MT	AED Specialist	Highway Depts.	Low
Initiate and promote a Farm to Institution program. This should include NY Farm to School, and Farm to Institutions like the Correctional Facility and Community College.	MT	CCE	Ag Council	Mod
Explore the feasibility of developing new small grain storage and handling facilities.	LT	IDA	CCE	Low
To ensure long-term resiliency in the face of changing weather patterns, technical and educational tools should be available to assist farmers identify and incorporate resiliency practices.	ONGOING	CCE	SWCD	Mod
Promote high tunnels and other innovative methods to expand the growing season for farmers in the County.	LT	CCE	Ag Council	Low
Promote more grass-based farming for livestock and poultry.	LT	CCE	SWCD	Low
Create a revolving loan fund oriented to loans or microloans for value-added, small farm, niche operation, or start-up farming operations.	LT	AED Specialist	Ag Council	High
Work closely with Mohawk Valley Regional Economic Development Council (REDC) to promote programs that support microenterprises related to agriculture, food-processing, capital for working small farm start ups, and marketing. Currently their programming does not emphasize these needs.	MT	AED Specialist		Low
Topic 2: Use Infrastructure to Enhance Food Processing Opportunities				
Use the excellent transportation connections and public water and sewer infrastructure available in the County to attract food aggregation and processing ideas recommended in Topic 1 including a food hub, meat processing, commercial kitchen, and other food processing.	MT	AED Specialist	IDA	Low
Continue supporting plans for a protein processing plant.	ST	IDA		Low

Recommended Strategy and Action	Target Date ⁶	Project Lead	Other Partners	Potential Cost ⁷
Develop a food hub to further market and distribute local foods. Expand ag-related processing and distribution infrastructure to increase capability.	MT	AED Specialist	IDA, Ag Council	High
Topic 3: Promotion and Marketing of Agriculture				
Develop and implement a strategic and multi-pronged public relations and marketing plan. Include local branding, new or expanded farm-related events, website enhancement for agriculture, improve farm marketing, promote local food products.	ST	Ag Council		High
Promote one person at each school to be an ag champion to foster an understanding about agriculture with teachers, administrators, students and parents.	MT	CCE		Low
Topic 4: Enhance Agricultural Education				
Promote innovative High School programs that promote agriculture such as that in Hamilton (Thank a Farmer Gift Boxes).	MT	CCE	Schools SWCD	Low
Have Herkimer County Agriculture and Food System training for teachers, administrators and guidance counselors.	MT	CCE	Schools	Low
Get farmers, especially FFA alumni involved in school, FFA, 4-H and other ag-education programs.	MT	FFA		Low
Bring students to the Herkimer County Fair via FFA booths to talk to the public about agriculture in the County.	MT	FFA		LOW
Create an annual forum focusing on the role of agriculture in the County and invite all 11 superintendents.	MT	FFA	CCE	LOW
Support grants for more ag education for schools. Build partnerships and support schools to seek more state grants to promote ag education.	LT	FFA	CCE	MOD
Invite educators to the farm progress show. Ensure members of each Board of Education is there to see and learn. Personal invitations and outreach are needed to accomplish this.	ST	FFA	CCE SWCD	LOW
Establish a program that could sponsor one or more students to attend the NYS FFA Convention. A funding initiative, especially with FFA alumni could help fund this scholarship. An alternative would be to initiate a crowd	MT	FFA	CCE	LOW

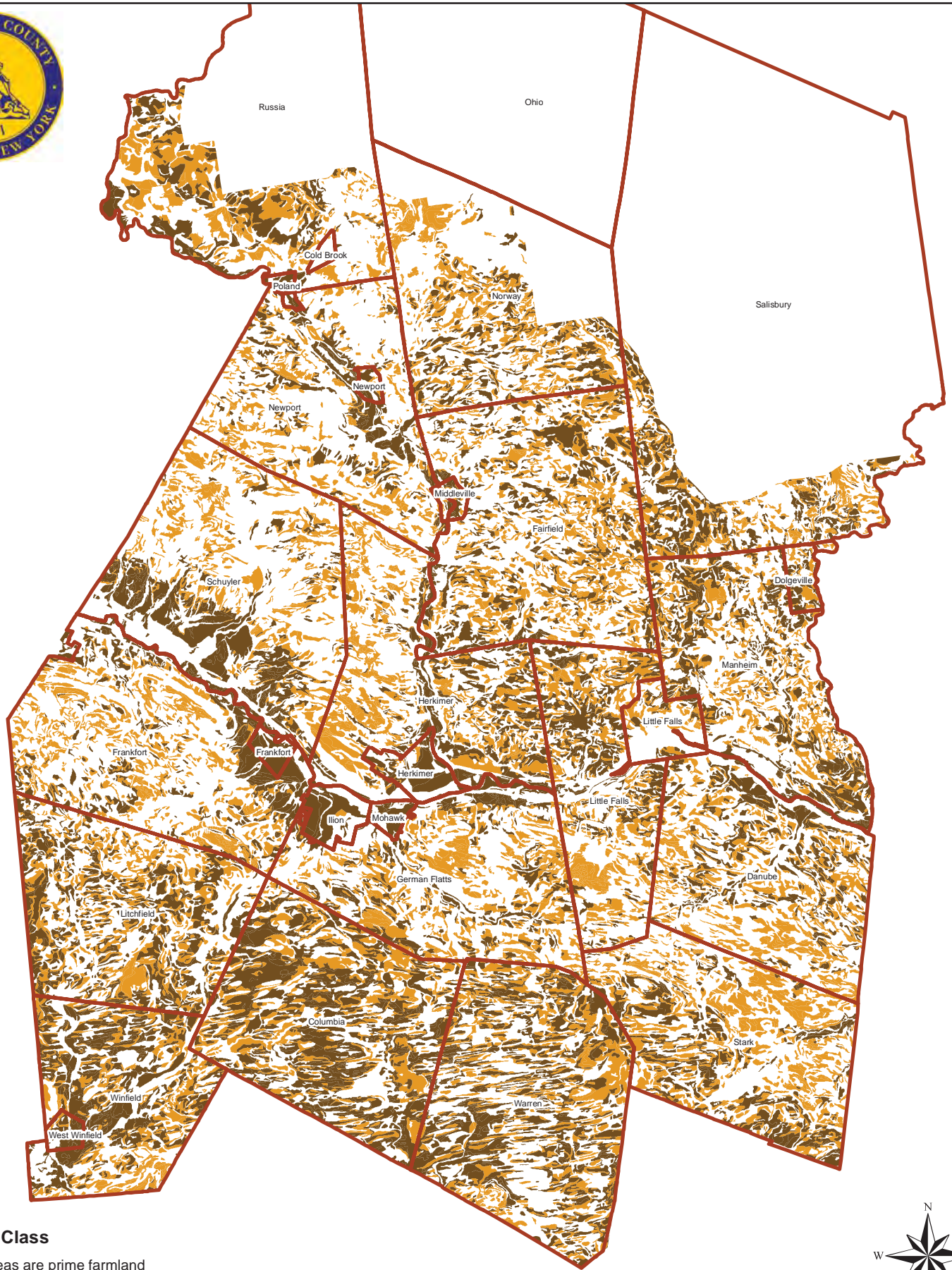
Recommended Strategy and Action	Target Date ⁶	Project Lead	Other Partners	Potential Cost ⁷
source program to fund small grants specifically for youth agricultural education.				
Inventory what other school ag programs are doing such as the Hamilton High School Farmer Gift Box program, or the Schoharie Central School FFA Farmer Recognition Meal.	LT	FFA	CCE	LOW
Initiate a youth and young farmer mentoring program.	ST TO MT	CCE	FFA, AG COUNCIL	MOD
Advocate for elected officials at all levels of government to have more interaction with the ag producers and processors in the County.	ONGOING	AG COUNCIL		LOW
Start a beginning farmer program. Use the many resources provided by the NYS Department of Agriculture and Markets, CCE, USDA, Young Farmers Coalition, and others to effectively use existing information and program to support new farmers.	MT	AG COUNCIL	YOUNG FARMERS COALITION	MOD
Organize area farmers to participate in and have a presence at career fairs held for high school and HCCC students.	MT	FFA	CCE	LOW
Promote formation of local municipal agricultural advisory committees to be resources to planning boards, town boards, and residents.	MT	HOCCPP	LOCAL TOWNS	LOW
Promote School Gardens (resources include the Microfarm manual, Center for Ecoliteracy, Food Corps programs). This program can work to instill in students, faculty and parents how food is grown and the importance of fresh, healthy food.	LT	SCHOOLS	CCE	MOD
Topic 5: Protect Farmland				
Develop a model solar regulation law suitable for Herkimer County towns that includes language that directs solar facilities away from critical farmlands.	ST	HOCCPP		LOW
Increase adoption of right-to-farm laws at the local and county level.	MT	HOCCPP	AFPB	LOW
Identify and map underutilized lands and vacant farmlands. Explore opportunities and incentives to return these underutilized lands to production to meet an agricultural need or new market demand.	MT	HOCCPP		LOW
Work with Herkimer- Oneida County Planning Agency to share resources and/or develop its own tool kit or resource guide to help local	MT	HOCCPP		LOW

Recommended Strategy and Action	Target Date ⁶	Project Lead	Other Partners	Potential Cost ⁷
communities understand their options for land use policies/plans or regulations that would help direct development to appropriate locations and protect farmlands.				
Provide information about purchase of development rights (permanent and term easements) to help farmland owners understand preservation options.	ONGOING	HOCCPP	LAND TRUSTS, CCE	LOW
Provide model local laws that are agriculture-friendly and available so that local municipalities can adopt them easily.	ST	HOCCPP	LOCAL TOWNS	MOD
Enhance Agricultural Environmental Management programs with local NRCS and SWCD resource staff.	ONGOING	SWCD		MOD
Provide land use training for town planning boards, zoning boards, and code enforcement officers so they are familiar with agriculture, the NYS ag district law, and local land use options to promote farming and farmland uses.	ONGOING	HOCCPP	LOCAL TOWNS	LOW

Appendix A: Maps

The following 10 maps are included in this Plan.

- Prime Farmland Soils and Farmland Soils of Statewide Importance
- Farmed Parcels
- Major Farm Types, Property Class 100-190
- Farmed Parcels – Property Class 912 – Forest Lands Participating in the State 480-a Forest Management Program
- Herkimer County New York State Certified Agricultural District #1
- Residential Structures Built in Herkimer County from 2002 through 2018
- Residential Structures Built in Herkimer County from 2002 through 2018 – “Hot Spots”
- Vacant Lands (Property Class 105 and 321)
- Priority Farmland Areas
- Aerial Image Overlay for Herkimer County
- Waterbodies and Mapped New York State Freshwater Wetlands
- Landscape Resilience to Climate Change



Soil Farm Class

- All areas are prime farmland
- Farmland of statewide importance



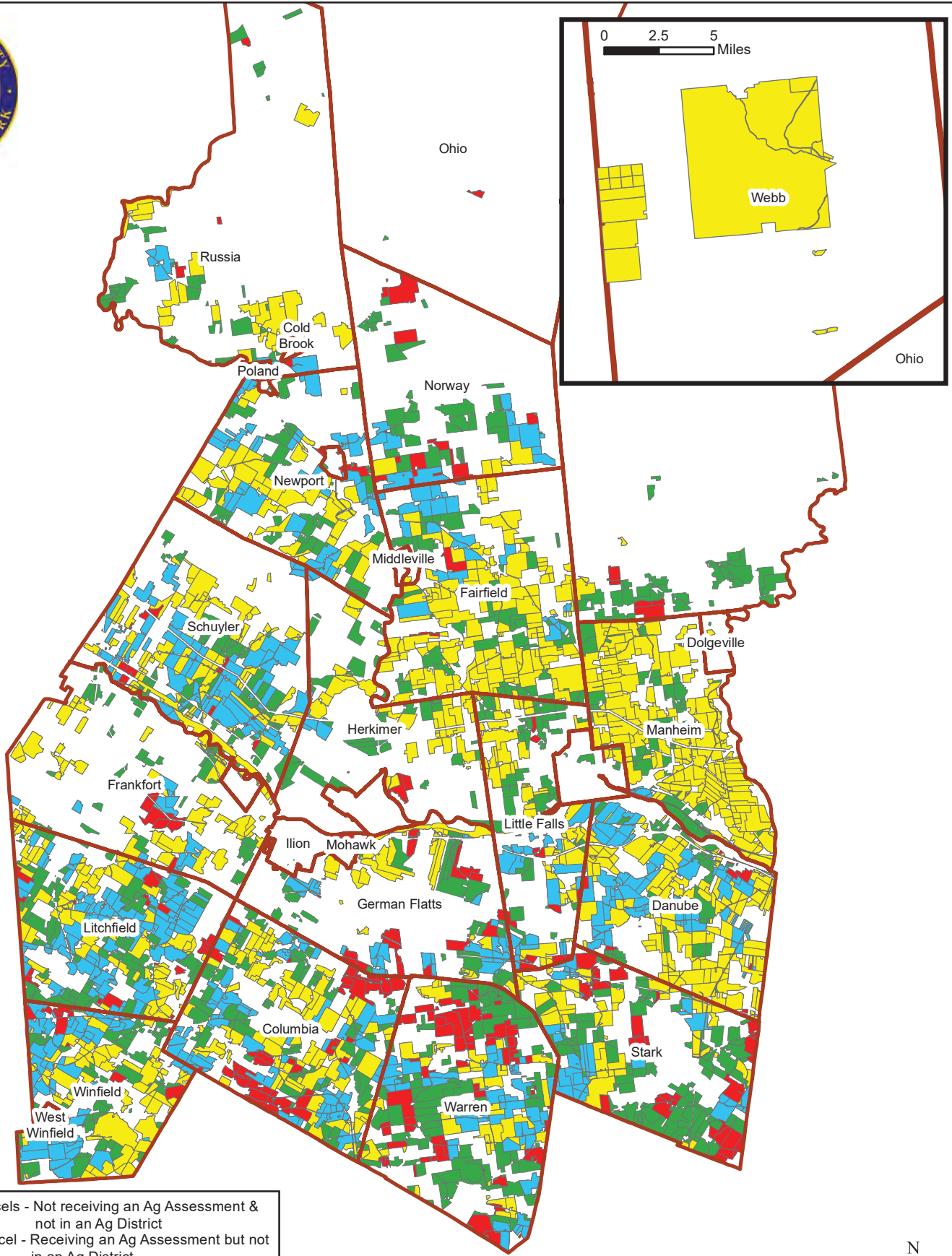
Prime Farmland Soils &
Farmland Soils of Statewide Importance
Herkimer County, NY

USDA Natural Resource Conservation Service

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Date: 1/22/2020



- Farmed Parcels - Not receiving an Ag Assessment & not in an Ag District
- Farmed Parcel - Receiving an Ag Assessment but not in an Ag District
- Farmed Parcel - In an Ag District but not receiving an Ag Assessment
- Farmed Parcel - Both, Receiving Ag Assessment and In an Ag District

Farmed Parcels Herkimer County, NY

Herkimer County Office of Real Property

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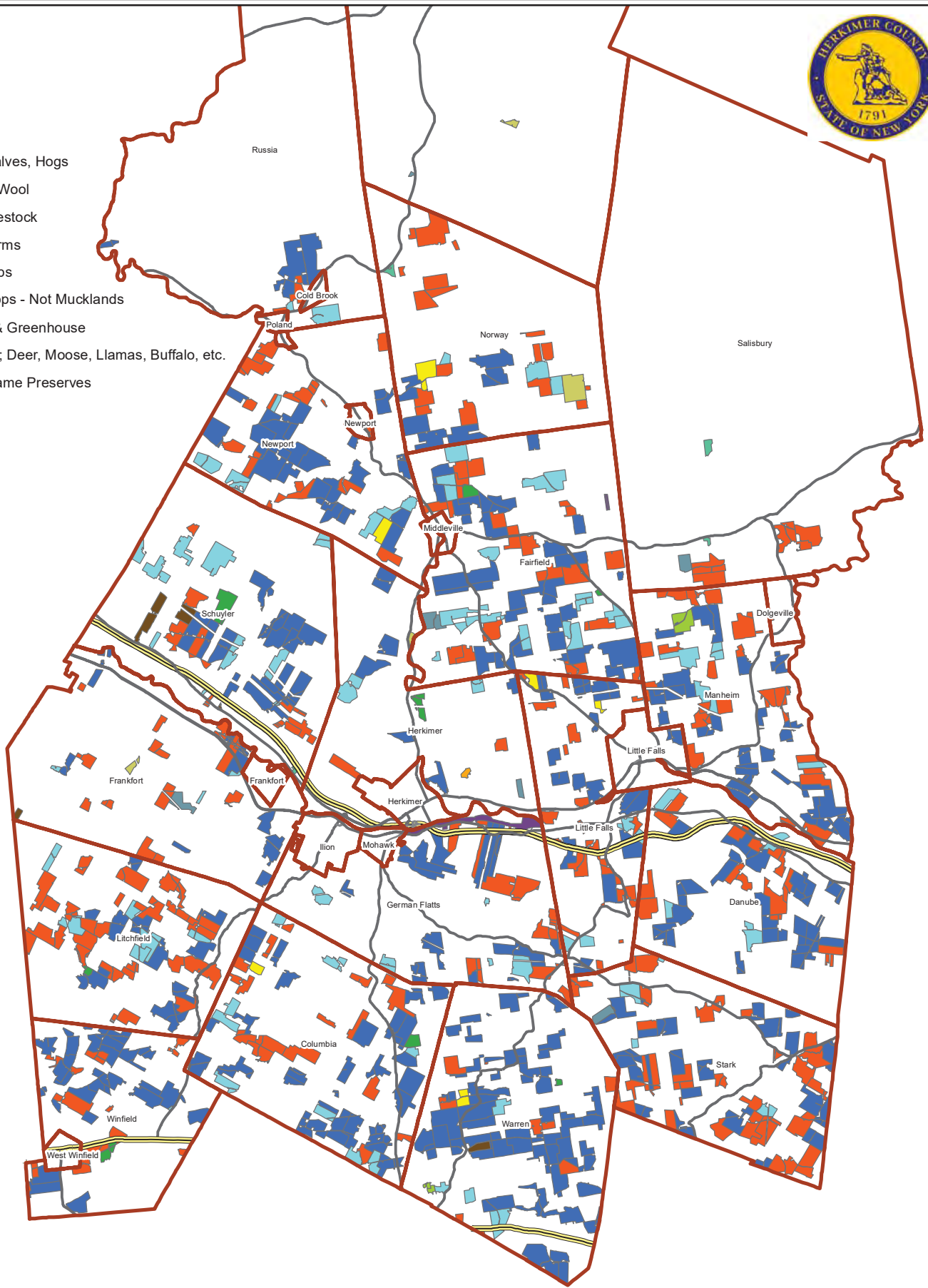
Date: 2/28/2020



Farm Type

Property Class

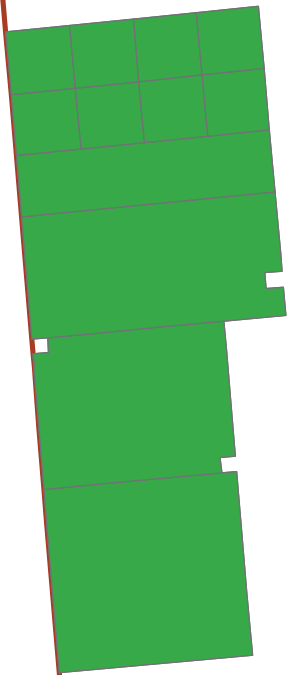
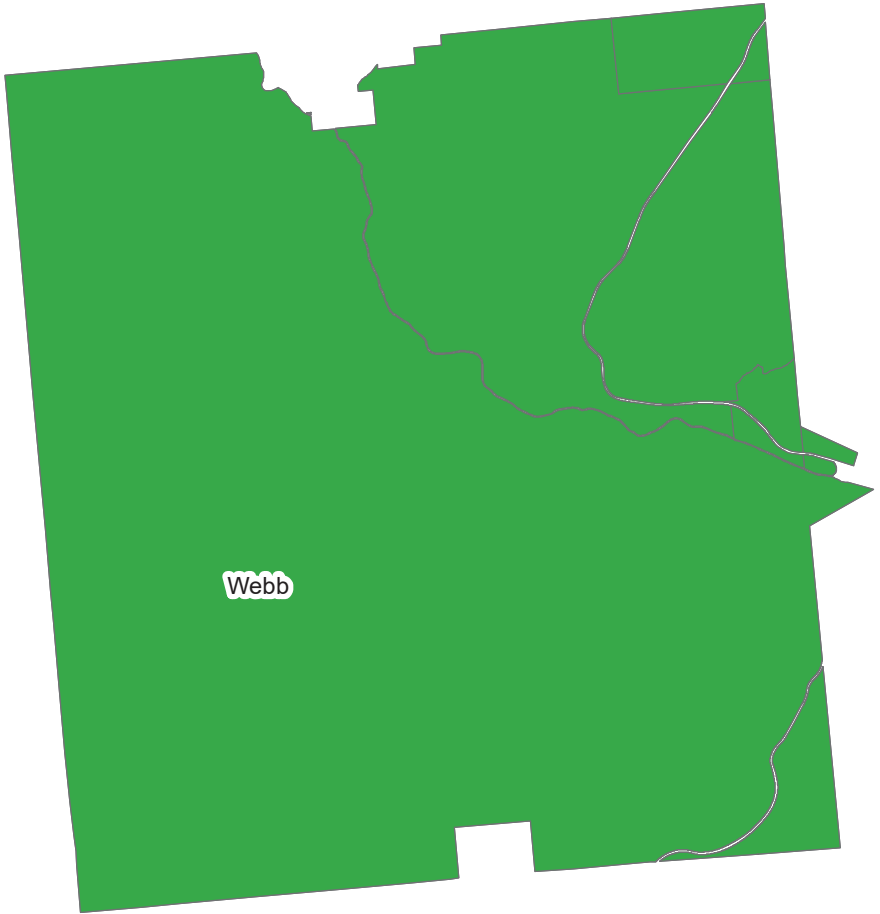
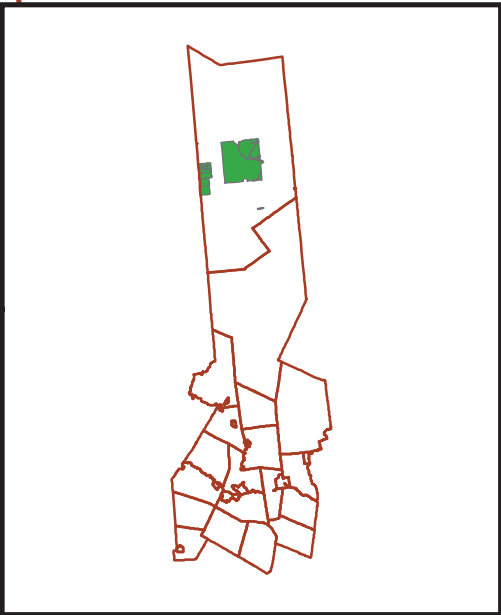
- 110 - Livestock
- 111 - Poultry
- 112 - Dairy
- 113 - Cattle, Calves, Hogs
- 114 - Sheep & Wool
- 116 - Other Livestock
- 117 - Horse Farms
- 120 - Field Crops
- 140 - Truck Crops - Not Mucklands
- 170 - Nursery & Greenhouse
- 184 - Livestock; Deer, Moose, Llamas, Buffalo, etc.
- 190 - Fish & Game Preserves



Major Farm Types Property Class 100 - 190 Herkimer County, NY

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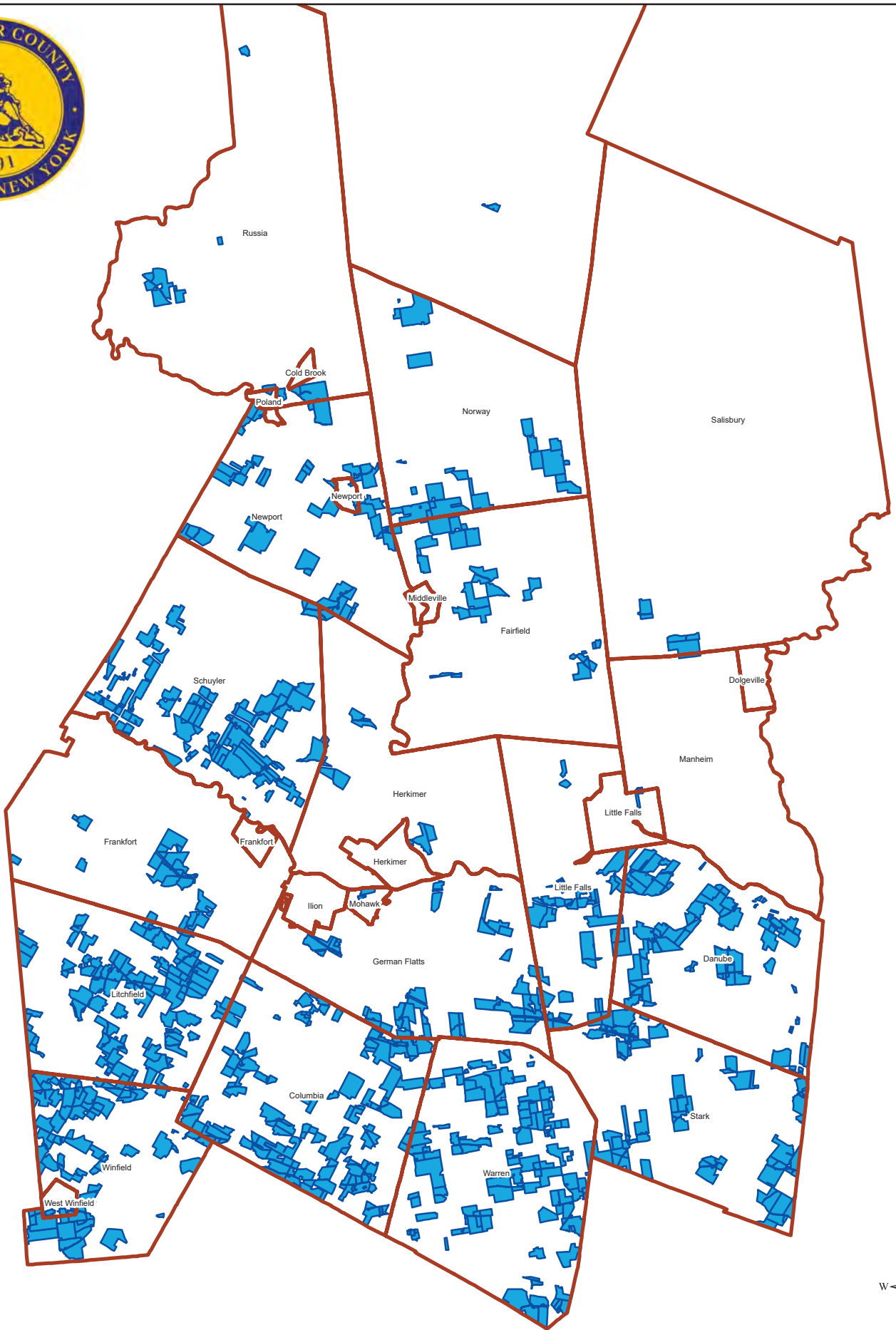
Farmed Parcels - Property Class 912
Forest Lands 480a
Herkimer County, NY

Herkimer County Office of Real Property

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0 0.5 1 2 Miles

Date: 2/28/2020



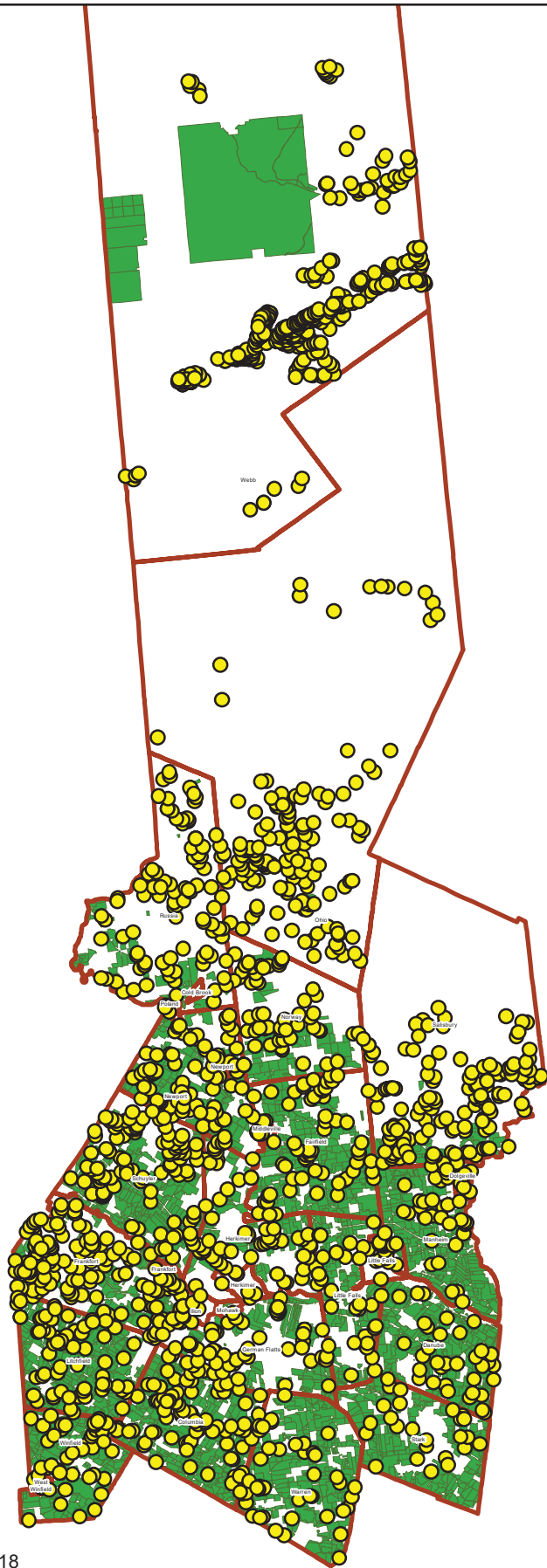
Agricultural District #1 Herkimer County, NY



Herkimer Oneida County Planning Department

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Date: 1/22/2020



Legend

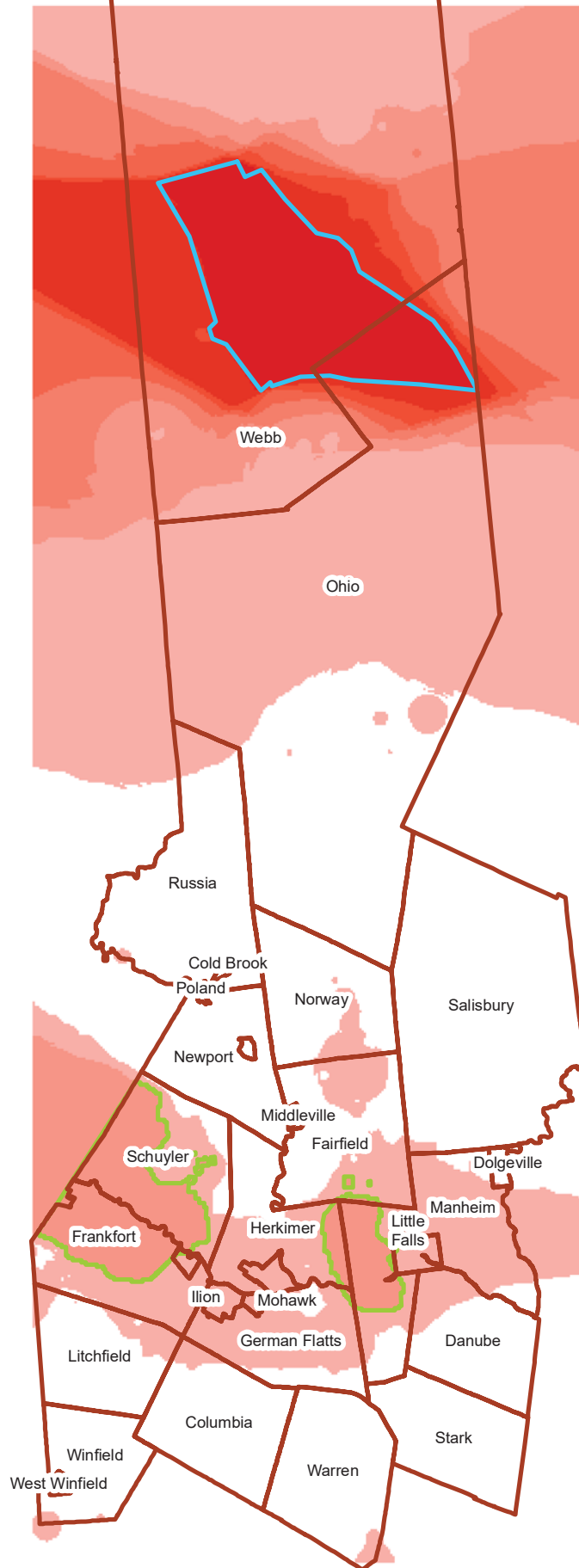
- Residential Structure Built 2002 to 2018
- Farmed Parcels





**Residential Structures Built
from 2002 through 2018
Herkimer County, NY**
Herkimer County Office of Real Property

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Date: 2/26/2020



-  Hot Spot - Zone 1
-  Hot Spot - Zone 2

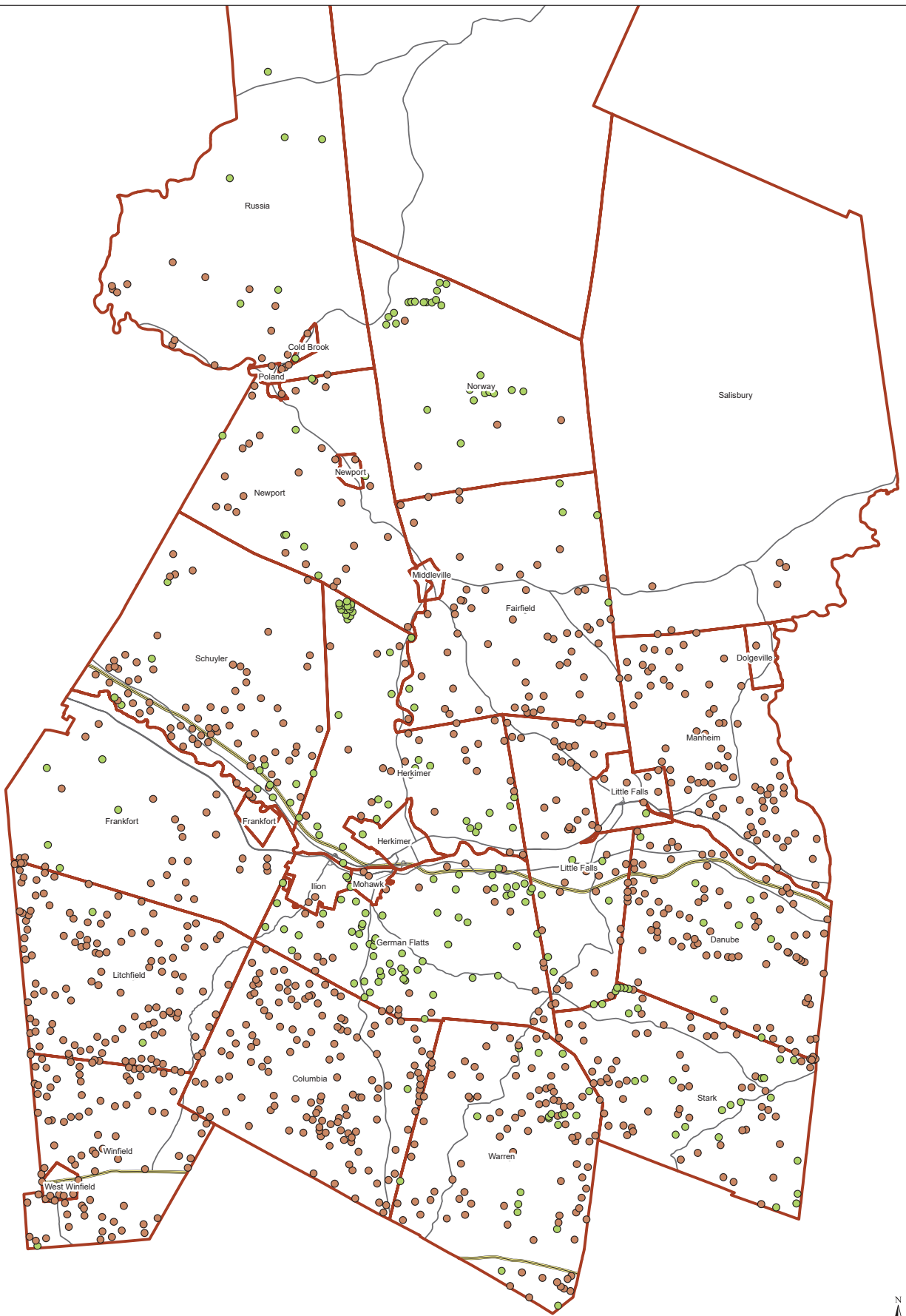


Residential Structures Built from 2002 through 2018 - "Hot Spots" Herkimer County, NY



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Date: 2/26/2020



Legend

**Vacant Lands
Property Class**

- 105 - Vacant Ag Lands
- 321 - Abandoned Ag Lands

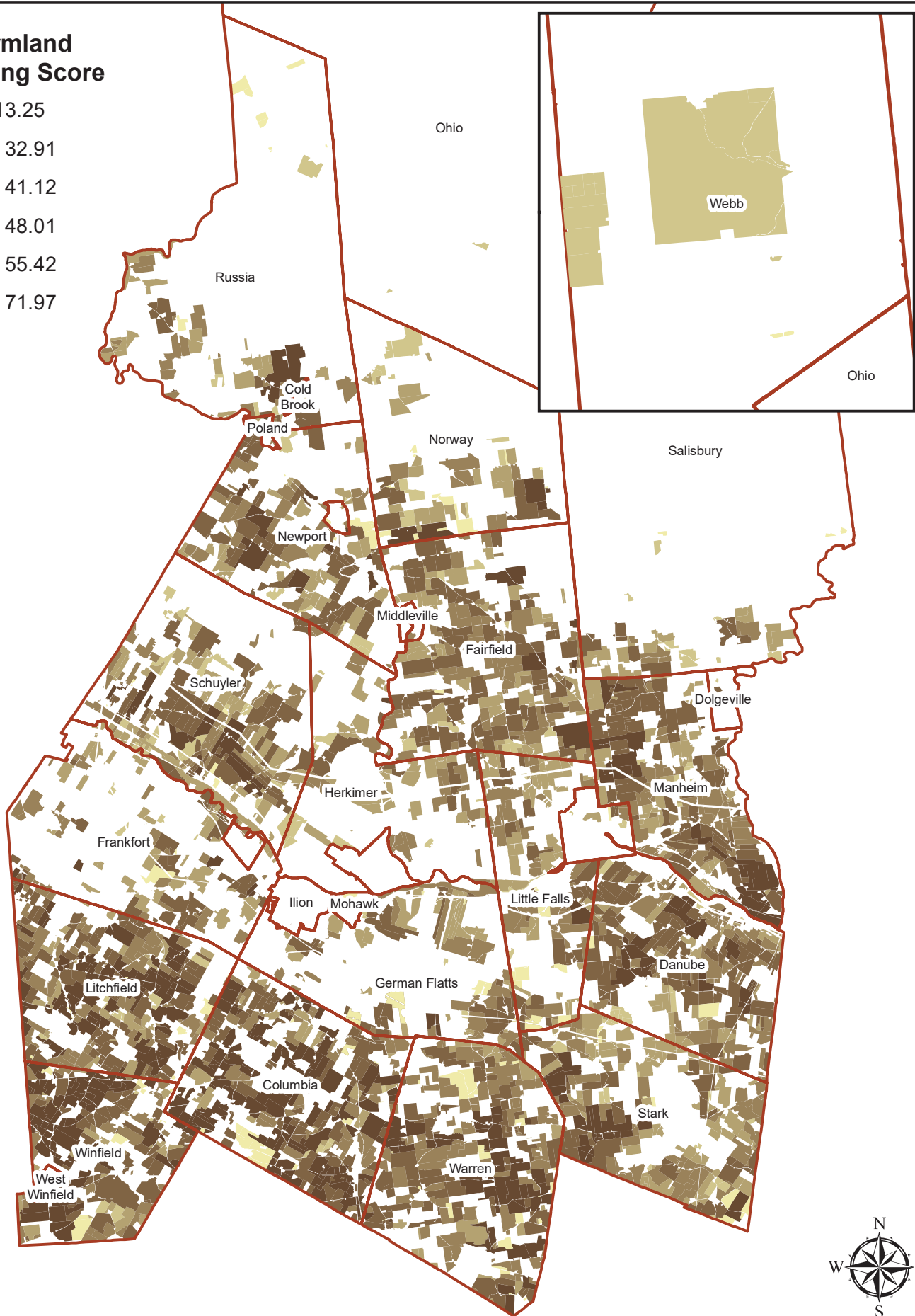
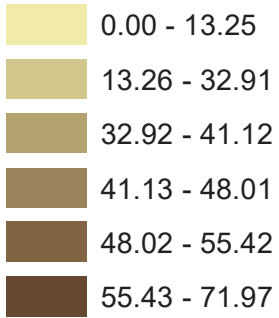


**Vacant Lands
Property Class 105 & 321
Herkimer County, NY**



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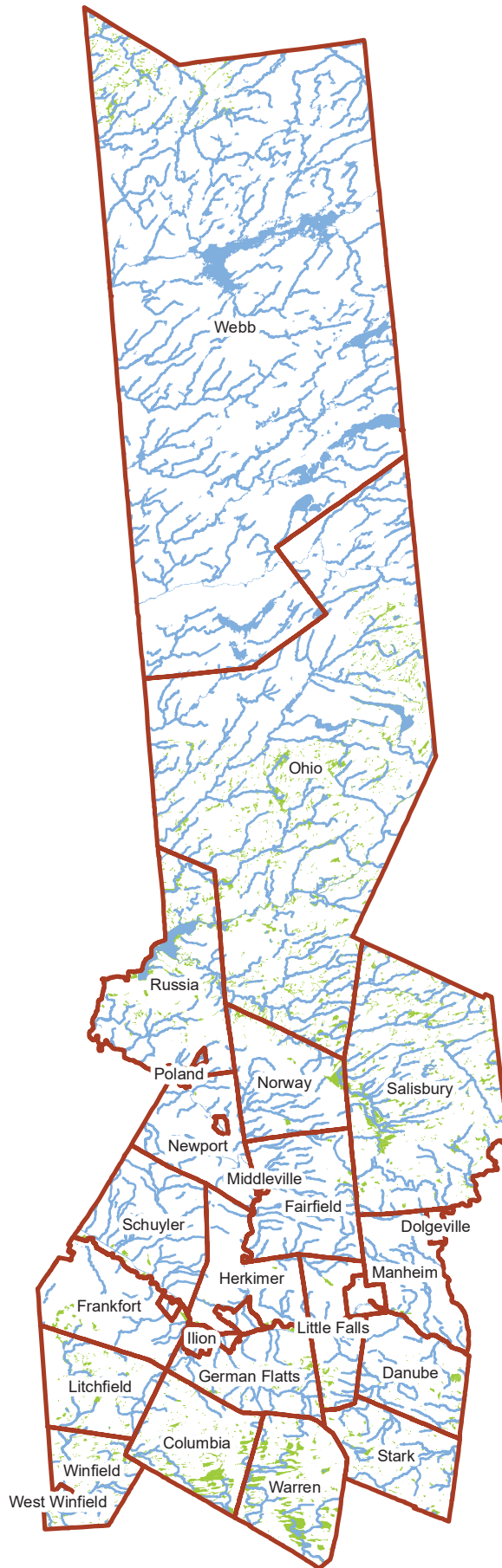
Priority Farmland Final Ranking Score



Priority Farmland Areas Herkimer County, NY

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Date: 2/26/2020



Legend

- Creeks, Streams, Rivers
- Lakes, Ponds, Reservoirs
- NYS DEC Freshwater Wetlands

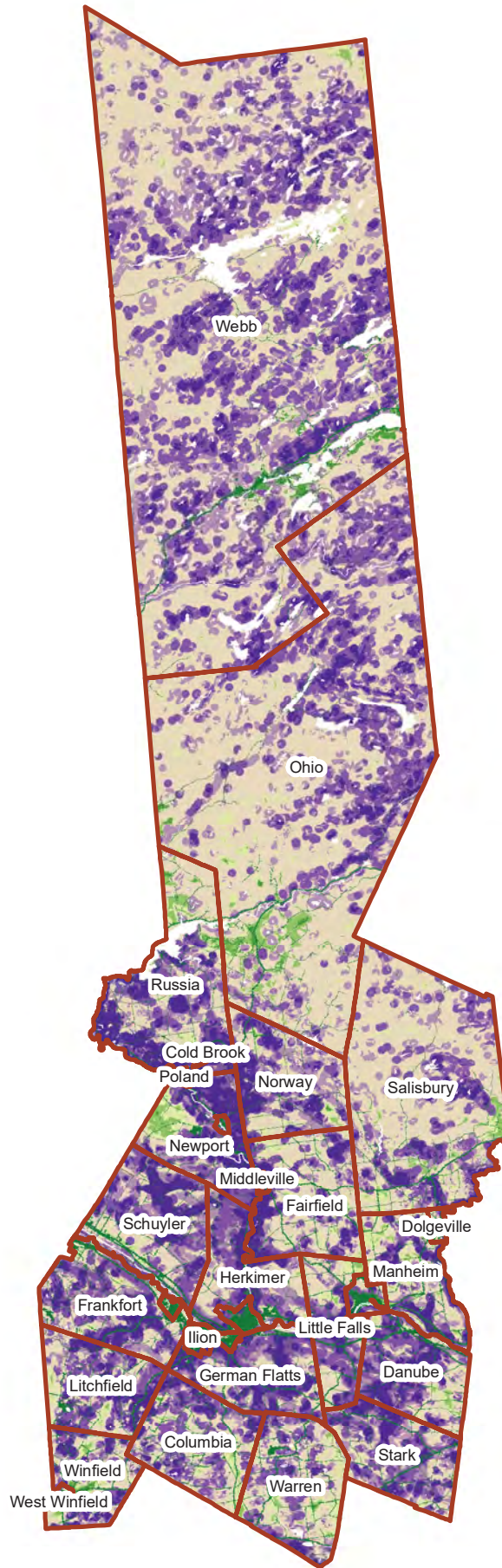


Herkimer County Waterbodies and mapped New York State Freshwater Wetlands



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Date: 3/4/2020



Legend

Resiliency to Climate Change

- Far Above Average
- Above Average
- Slightly Above Average
- Average
- Slightly Below Average
- Below Average
- Far Below Average
- Developed



Landscape Resilience to Climate Change

The Nature Conservancy



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Date: 3/4/2020

HERKIMER COUNTY
AGRICULTURAL
AND FARMLAND
PROTECTION PLAN
JULY 2020

Part 2

A Strategic Plan for
Agricultural
Enhancement in the
County

Contents

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APPENDIX B: AGRICULTURE IN THE COUNTY 2

FARM AND FARMLAND CHARACTERISTICS2

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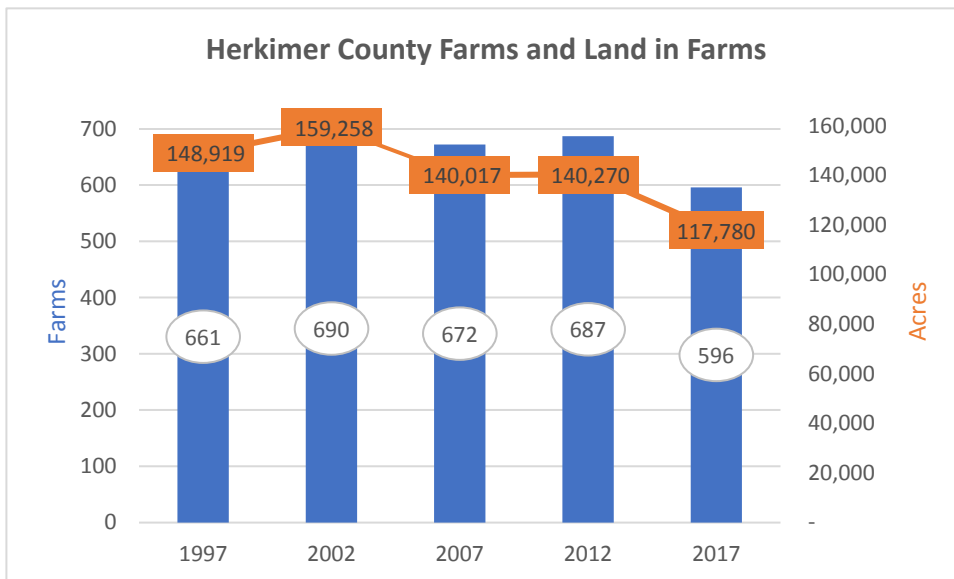
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Appendix B: Agriculture in the County

Farm and Farmland Characteristics

- According to the 2017 Census of Agriculture¹, there are 596 farms in Herkimer County, a nearly 10% decrease from the number in 1997 and a net loss of 91 farms since 2012 (**Figure 1**). Some of the farms that have been lost, especially dairy farms, have been consolidated into larger farm operations.
- The amount of land in farms in Herkimer County totaled 117,780 acres in 2017, reflecting a net loss of more than 31,000 acres (-20.9%) since 1997. Farms utilize approximately 13% of the County’s total land area. See Farmed Parcels Map.

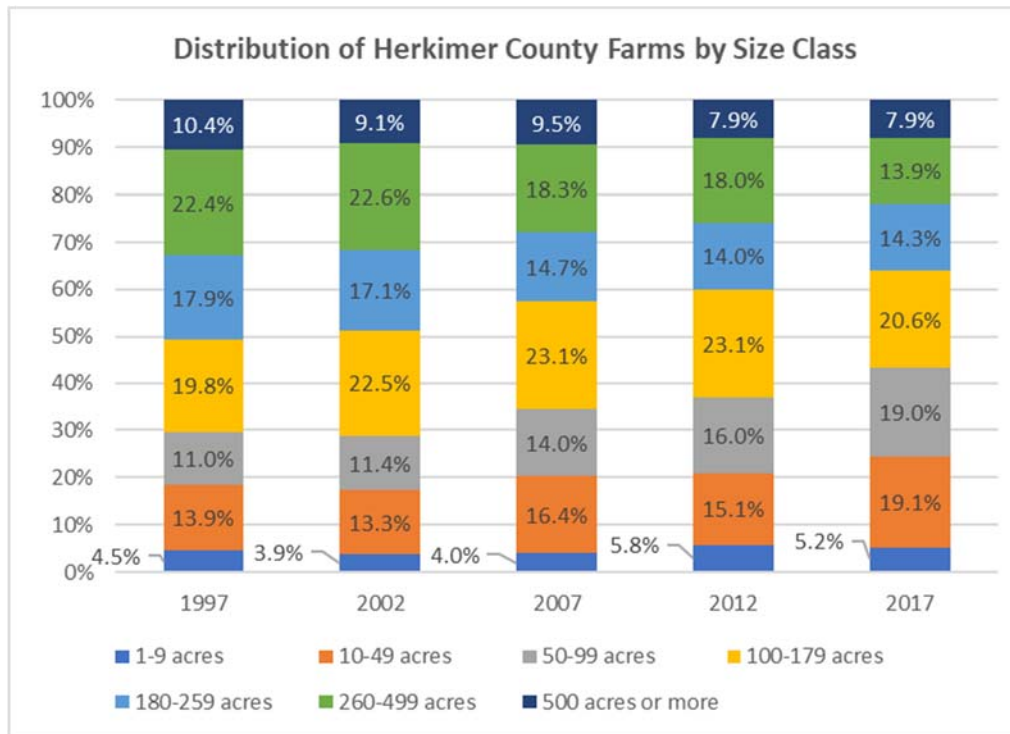
FIGURE 1.



- The average farm in the County in 2017 was 198 acres, smaller than the New York State average of 205 acres. Only 47 farms in Herkimer County, or 7.9%, had 500 acres or more.
- Excluding farms with at least 1,000 acres, there was a net decline in the number of mid-sized and large farms in Herkimer County between 1997 and 2017. Virtually all of the growth in the number of farms over the last 20 years has been among those with 100 acres or less (**Figure 2**).

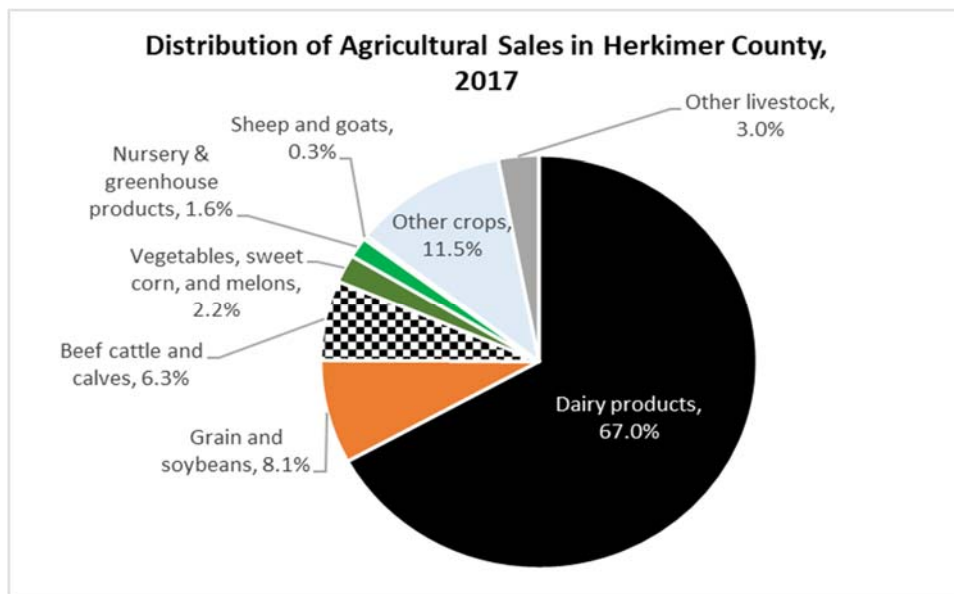
¹ Please note that the 2002 Agricultural Census introduced new methodology to account for all farms in the United States. All published 2002 census items were reweighted for under coverage; comparable 1997 data published in 2002 were also reweighted. As a result, some 1997 figures differ from those reported in Herkimer County’s previous (October 2002) Agriculture and Farmland Protection Plan.

FIGURE 2.



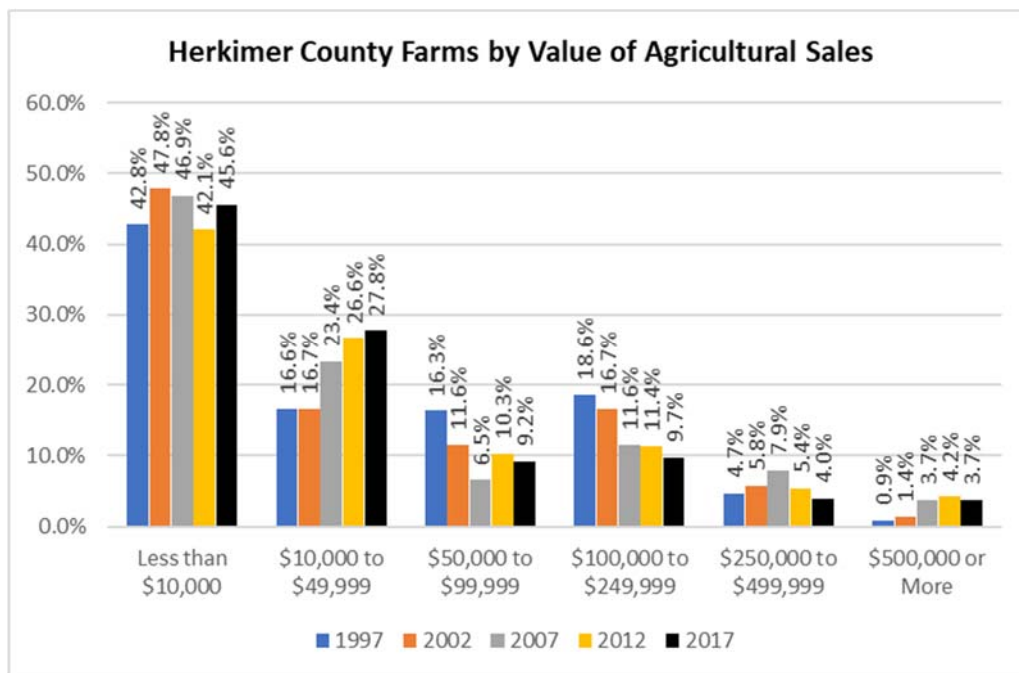
- Herkimer County farms generated \$57.9 million in sales in 2017, with the livestock sector accounting for about 77% of the total (\$44.4 million). The leading agricultural commodities were dairy products (\$38.8 million), hay and silage (\$6.7 million), grain and soybeans (\$4.7 million), beef cattle (\$3.6 million), and vegetables, sweet corn, and melons (\$1.3 million).

FIGURE 3.



- In 2017, Herkimer County ranked 34th in the state in the total sales of agricultural products and 25th in the value of milk and dairy products sold.
- More than 45% of all farms in Herkimer County had agricultural sales of less than \$10,000 in 2017, slightly higher than the proportion in 1997 (**Figure 4**). The previous Agriculture and Farmland Protection Plan speculated that many of these are part-time or hobby farms. An additional 37% had sales between \$10,000 and \$99,999, while 17% of farms earned \$100,000 or more.
- Since 1997, there have been reductions in both the number and share of farms with sales of \$50,000 to \$99,999, as well as those earning between \$100,000 and \$249,999. Conversely, the number and proportion of farms with sales of \$10,000 to \$49,999 increased. Interestingly, farms earning \$500,000 or more also became more numerous, growing from 6 (or 0.9% of all farms in the County) in 1997 to 22 (3.7%) in 2017.

FIGURE 4.



- Although milk from cows remains the number one agricultural product in Herkimer County, its share of total agricultural sales decreased from more than 80% in 1997 to 67% in 2017. Moreover, the proportion of farms with dairy cows declined significantly, from 43% to 21%, over the 20-year period.
- Between 1997 and 2017 there was a 47% reduction in the number of milk cows in Herkimer County, with the largest share of the decline occurring between 2002 and 2007. The average number of milk cows per dairy farm increased moderately, from 68 to 85, but (like other counties in the Mohawk Valley) trails the state average of 135.

- Agricultural operations and activities in Herkimer County have become increasingly diverse (**Table 1**). Since 1997, the composition of farms by principal product² has shifted away from dairy operations towards growing various crops (such as hay, grain, or vegetables), nursery and greenhouse production, and raising mixed livestock. See Major Farm Types, Property Class 100-190 Map.

	1997	2002	2007	2012	2017
Oilseed and grain farming	4.5%	6.5%	3.3%	6.3%	8.4%
Vegetable and melon farming	2.2%	2.8%	4.9%	4.1%	4.9%
Fruit and tree nut farming	1.2%	1.0%	1.2%	2.0%	2.0%
Greenhouse, nursery, and floriculture production	4.5%	6.1%	3.7%	5.4%	6.0%
Other crop farming (incl. hay and mixed crops)	17.2%	24.9%	32.6%	33.3%	33.6%
Beef cattle ranching and farming	15.6%	13.0%	12.9%	12.2%	15.4%
Cattle feedlots	1.0%	2.0%	0.6%	0.3%	1.0%
Dairy cattle and milk production	45.8%	32.2%	26.0%	22.1%	15.8%
Hog and pig farming	0.9%	0.1%	0.4%	1.0%	1.3%
Poultry and egg production	1.4%	1.0%	2.7%	1.3%	1.8%
Sheep and goat farming	1.0%	1.4%	1.5%	1.2%	4.4%
Other animal production (incl. mixed livestock)	4.8%	8.8%	10.1%	10.8%	5.4%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%

Source: U.S. Department of Agriculture, Census of Agriculture.

- A total of 46 farms in the County reported harvesting vegetables for sale in 2017, mainly for fresh markets (as opposed to processing). Vegetables harvested include asparagus, snap beans, broccoli, cabbage, carrots, cucumbers, lettuce, onions, bell peppers, squash, sweet corn, and tomatoes.
- Maple syrup production in Herkimer County has been increasing. Data is not available for 1997, but farms produced 937 gallons of maple syrup in 2002 and 2,219 gallons in 2017.
- In constant 2017 dollars (i.e., in values adjusted to account for inflation), total farm sales declined by 18% over the twenty-year period (**Figure 5**). While sales of crops in Herkimer County rose by more 128%, sales of livestock and their products declined by 32%. There was substantial growth in the sales of grain and soybeans, hay, and sheep, goats, and their products.
- In 2018, according to the Federal Milk Marketing administrator, there were 129 dairy farms in Herkimer County selling 265.8 million pounds of milk for the year, compared to 182 dairy farms selling 220.5 million pounds of milk in 2008 (**Figure 6**). Average milk production per farm grew from 1,211,000 pounds in 2008 to 2,060,000 pounds in 2018.³

² "Principal product" refers to the crop or animal accounting for at least 50% of the farm's agricultural production.

³ Source: Northeast Milk Marketing Area, Federal Order #1, Market Administrator's Annual Statistical Bulletins.

FIGURE 6.

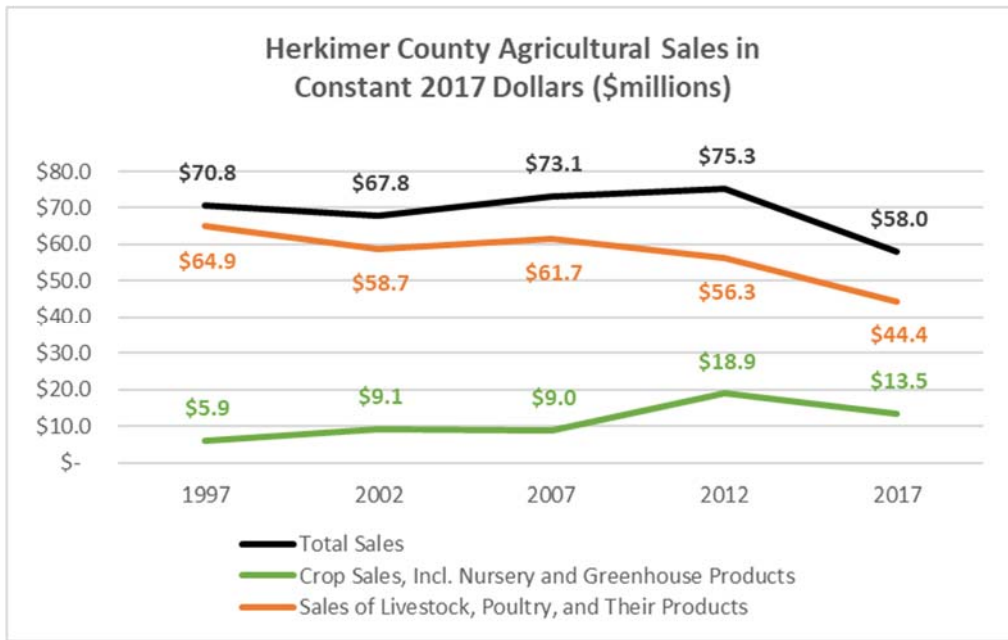
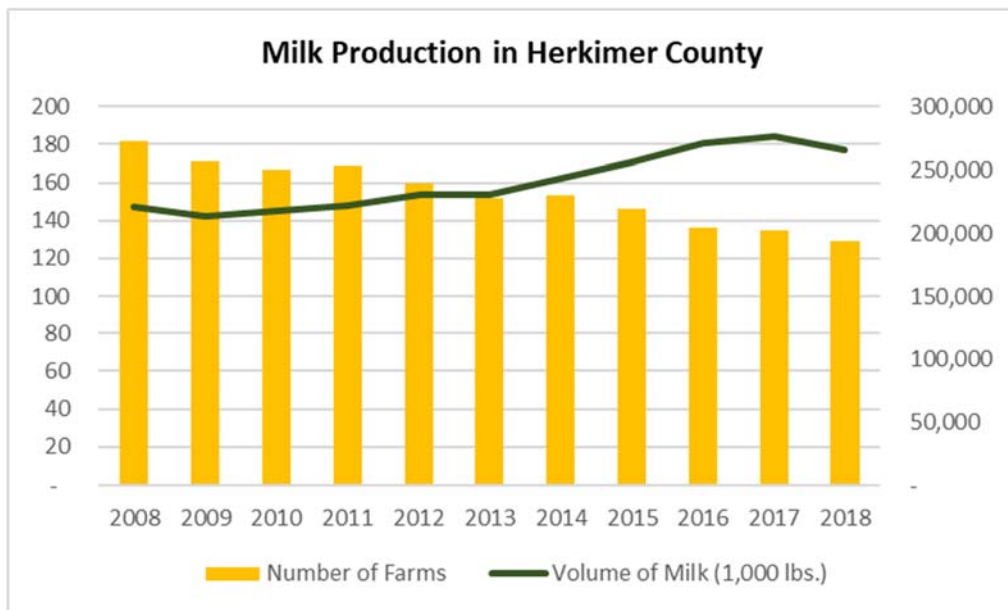


FIGURE 5.



- The value of agricultural products sold directly to consumers through such venues as farm stands and farmers markets increased from \$498,000 in 1997 to \$1,368,000 in 2017. Organic product sales in Herkimer County increased dramatically, from \$2,096,000 in 2007 (the first year this question was included) to \$6,496,000 in 2017.

- The Agricultural Census reports that in 2017, 24 Herkimer County farms (4.0%) sold organic products, and 21 farms (3.5%) sold agricultural products directly to retail markets, institutions, and food hubs. Only four farms (0.7%) earned income through agri-tourism and recreational services, a reduction from 12 reported in 2007.
- The Census of Agriculture measures the contributions of individuals involved in farm operations and agricultural production in two ways:
 - The first is by tallying *principal producers* (formerly known as principal operators). These are defined as the individuals involved in making decisions for the farm about land uses and crops, livestock, record-keeping and/or financial management, and day-to-day operations. With the 2017 Census, data were collected for up to four principal producers per farm; previously, it was restricted to just one producer per farm. In 2017, there were 596 farms in Herkimer County, with 819 principal producers. The total number of producers increased by nearly 20% between 2012 and 2017, as farms reported multiple individuals involved in farm decision making.
 - The second measure is by identifying *on-farm hired labor*. Hired farm workers may include paid family members. In 2017, 138 farms in Herkimer County (about 23% of all farms) reported having on-farm hired labor. These farms had a total of 417 employees, with \$4.7 million in annual payroll. Note that these workers were in addition to the principal producers or operators of the farm. The number of workers employed by local farms has declined from 630 in 1997, when 220 farms had hired labor.
- The average age of principal farm producers/operators in Herkimer County has been rising for many years, from 52.8 years in 1997 to 58.5 in 2012. In 2017, however, the average age was reported at 57.7. This may be due to growth in the number of young Amish families in the County. In 2012, only 2% of principal producers were under age 35; by 2017, the proportion had increased to 9%. Nearly 36% of principal producers are age 65 and over, while 26% are between ages 55 and 64.
- There are two farm breweries, one farm winery, and one farm distillery in Herkimer County licensed by the New York State Liquor Authority as of July 2019.
- A total of 25 certified nursery growers and greenhouses in Herkimer County were licensed by the New York State Department of Agriculture and Markets as of July 2019.
- Farmers' markets in the County, according to the New York State Department of Agriculture and Markets, are located in Herkimer, Little Falls, Mohawk, Newport, Old Forge, Salisbury Center, and West Winfield. The majority of the markets operate seasonally.
- Industries linked to agriculture in Herkimer County include agricultural production support services, food manufacturing, and farm product wholesaling. The County's 7 food manufacturing

establishments provide approximately 400 jobs with more than \$17 million in annual payroll, according to County Business Patterns.

Benchmarking Herkimer County

Table 2 below looks at agriculture in Herkimer County in comparison to its neighbors: Oneida County to the west, Otsego County to the south, and Montgomery County to the east. As the data indicate, in the number of farms and acreage in farms, Herkimer County is most like Montgomery County. Agricultural product sales, however, are lower, both in total and on a per-farm basis. This is probably due to differences in farm types and sizes.

	Herkimer	Oneida	Otsego	Montgomery
Number of farms	596	967	880	564
% change in number of farms from 2012	-13%	-9%	-12%	-14%
Land in farms (acres)	117,780	192,767	154,634	114,990
% change in farmland acreage from 2012	-13%	-6%	-14%	-12%
Average acres per farm	198	199	176	204
Market value of products sold (000)	\$57,977	\$100,455	\$56,180	\$74,959
State rank in value of products sold (of 61 counties)	34	21	35	29
Average market value of products sold per farm	\$97,277	\$103,883	\$63,841	\$132,906
Shares of sales by type:				
Crops	23%	30%	35%	24%
Livestock	77%	70%	65%	76%
Sales of milk from cows (000)	\$38,844	\$60,046	\$28,587	\$45,860
State rank in value of milk sold (of 51 counties)	25	16	30	21
Percent of farms that:				
Farm organically	4.0%	1.4%	6.0%	8.2%
Sell directly to consumers	15.8%	15.7%	13.5%	13.5%
Sell directly to retail markets, institutions, and food hubs	3.5%	2.0%	3.5%	4.8%
Hire farm labor	23.2%	23.8%	18.4%	21.5%
Have less than \$10,000 in annual sales	45.6%	51.1%	55.9%	42.0%
Earn income through agri-tourism	0.7%	1.4%	2.8%	1.2%
Have an on-farm packing facility	1.3%	1.9%	1.7%	2.5%
Sales of organic products (000)	\$6,496	\$1,291	\$5,555	\$5,199
Number of principal producers/operators	819	1,667	1,519	951
Average age of principal producers/operators	57.7	54.6	56.1	54.3

Source: Census of Agriculture

Only 4.0% of farms in Herkimer County farm organically, compared to 8.2% in Montgomery County, but Herkimer County has the highest volume of sales of organic products of the four counties, about \$6.5 million. It also has the highest proportion of farms selling directly to consumers at 15.8%.

Figures 7, 8, and 9 below present trends in milk production in the three comparison counties based on data from the Federal Milk Marketing administrator. (See Figure 6 for Milk Production in Herkimer County.) Like Herkimer County, the volume of milk produced has generally increased over the past decade in Oneida and Montgomery Counties, even as the number of dairy farms has declined. This is partly attributable to the purchase and consolidation of small dairy farms by larger ones, as is the case in Herkimer County. In contrast, Otsego County, which has mostly small farms, has experienced a steady drop in milk production.

FIGURE 7.

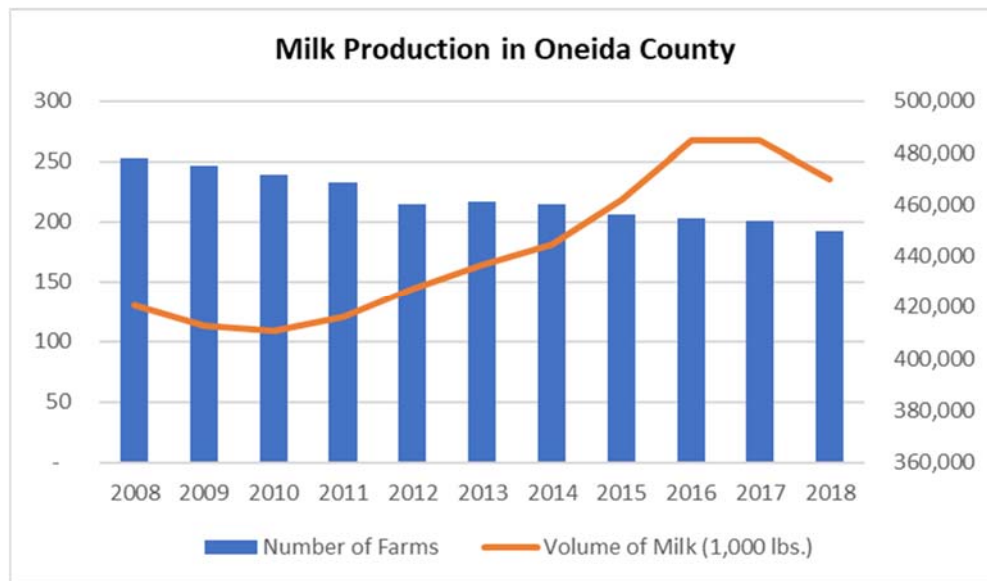
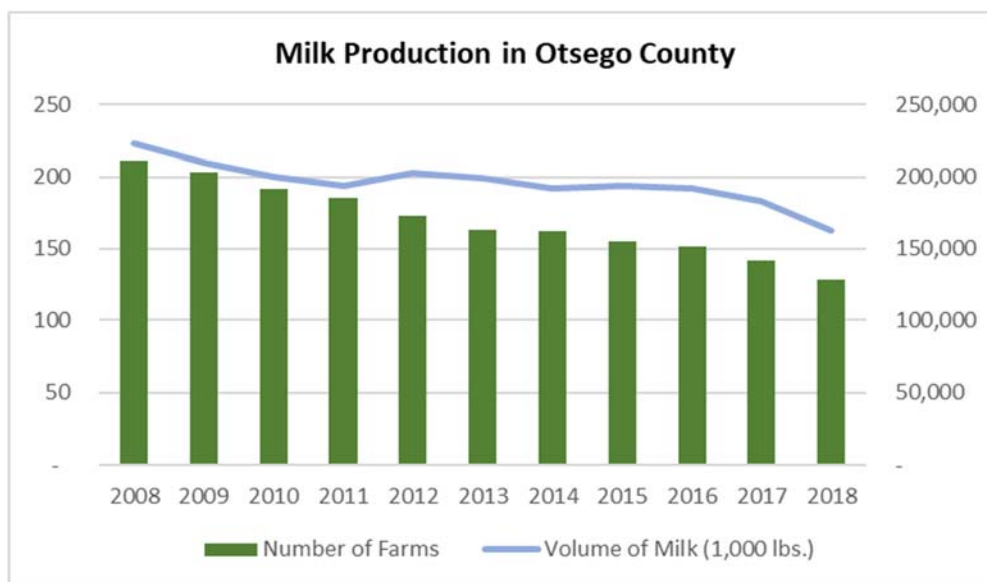


FIGURE 8.



There are some differences among the four Mohawk Valley counties in terms of dairy productivity, as shown in Figure 10. This is probably related to the number of milk cows per dairy farm; larger dairies tend to be more productive than small operations.⁴ In the amount of milk produced per farm, Herkimer County is second only to Oneida County.

FIGURE 9.

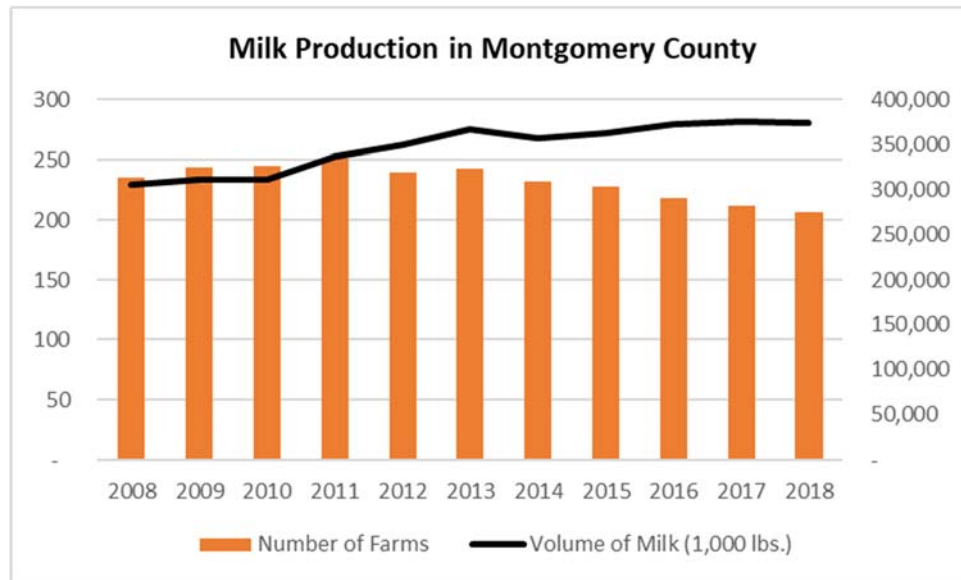
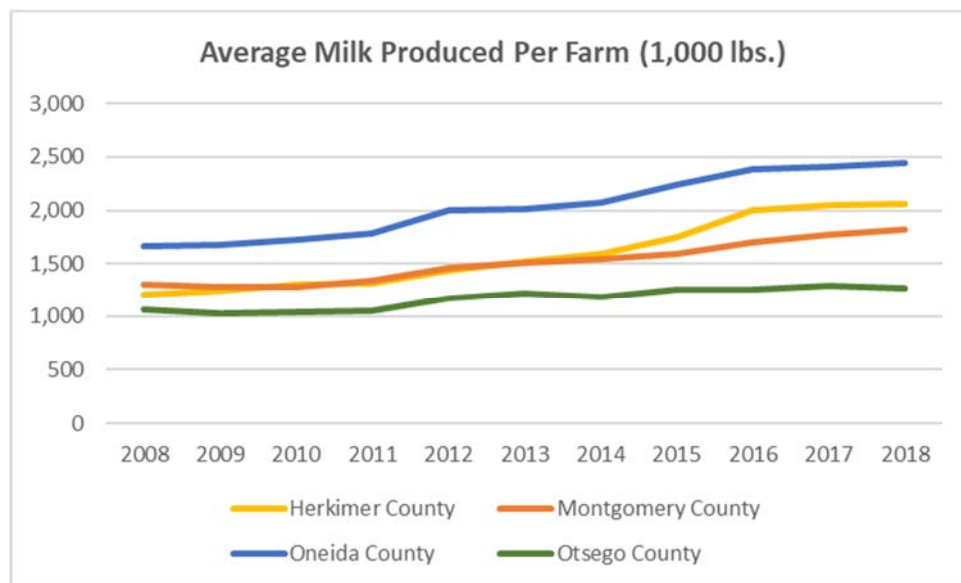


FIGURE 10.



⁴ In 2017, the average number of milk cows per dairy farm was 85 in Herkimer County, 87 in Oneida County, 63 in Otsego County, and 86 in Montgomery County. All of the counties except Oneida saw a decline in the inventory of dairy cows between 2012 and 2017, with the most dramatic decline in Otsego County (-26%).

Agricultural District and Assessment Participation in Herkimer County

Agricultural Assessments

The New York State Agricultural Law provides property tax relief for farmers through an agricultural assessment program. Agricultural assessments allow land to be assessed for its agricultural value, rather than its market, or non-farm value. Owners of land used in agricultural production are eligible to receiving an agricultural assessment on their real property if they meet certain minimum requirements. Eligible land is defined as “not less than 7 acres of land used as a single operation in the preceding two years for the production for sale of crops, livestock or livestock products of an average gross sales value of ten thousand dollars or more.” In 1994, the law was amended to permit farms less than 7 acres in size with gross sales of \$50,000 or more to qualify as land in agricultural production. The definition also includes rented land, support land, woodland up to 50 acres, and land set aside in a federal conservation program. To be eligible, the land must either be in an agricultural district or subject to an individual commitment to use the land in agricultural production for eight years. The landowner must apply yearly to the local assessor to receive an agricultural assessment. Agricultural assessments are calculated annually.

Agricultural assessments are calculated based on the quality of soils present. The Department of Agriculture and Markets is responsible for establishing and maintaining this. It is based upon soil productivity and capability. Furthermore, the State Board of Equalization and Assessment annually is required to calculate an agricultural assessment based on soil productivity in conjunction with the land classification system. The portion of the market value of land used for agricultural production that represents excess above the agricultural assessment is not subject to real property taxation.

When land that has received agricultural assessments is converted to a non-agricultural use, it is subject to a penalty payment. These payments equal five times the taxes saved in the last year in which the land benefited from an agricultural assessment, plus 6 percent interest compounded annually for each year in which the assessment was granted, not exceeding five years. If only part of a parcel is converted, the payment is based on the converted part of the parcel that received the agricultural assessment. Landowners must notify the assessor whenever this occurs. Failure to do so can result in penalties up to \$500. Enforcement of this penalty is by the local assessor. In many cases, the penalty payments are not enforced, or considered to be too small to be a major deterrent to taking land out of production.

According to the Herkimer County Real Property Office, in 2019, 1,379 parcels received almost \$20,498,249.00 in property reductions in assessed value. That number represents only the dollar amount taken “off” of the total assessment. This does not incorporate equalization rates, as each municipality is different, and this dollar figure does not represent actual tax dollars due, only the assessment value.

Agricultural Districts

Article 25AA of the New York State Agriculture and Markets Law authorized the formation of districts to provide protection of farmland and businesses. Agricultural districts safeguard farmers from unreasonable local regulation, place limits on eminent domain, require coordinated land use decisions, and enhance right-to-farm protection.

In Herkimer County, five districts that originally formed in the 1970's were consolidated into one certified New York State Agricultural District in 2019 (See Farmed Parcels Map). The total area of these lands covers approximately 54,430 acres of land (all land uses). Of those farmed acres, 2,922 are cropped, 41,872 acres owned by farmers, 11,833 acres are rented by farmers.⁵ The Farmed Parcels Map also shows that there are many farmed parcels that do not participate in either the NYS Agricultural Districts or in the agricultural assessment program. Many of these parcels are also ranked moderately high or high as priority farmlands. Some are also located where prime agricultural soils exist. This is especially true in Manheim where no farms are enrolled in the NYS Agricultural District.

Farmland Soils

Traditional farming activities such as dairy or crop farms can be found in most parts of Herkimer County outside of the Adirondack Park (where the prime agricultural activity is forestry) and more urbanized areas such as the City of Little Falls and Village of Mohawk. However, the most productive, profitable, and sustainable farms are typically located in areas where the soils are appropriate for agricultural activity. The United States Department of Agriculture's Natural Resources Conservation Service (NRCS) has mapped and described those soils in Herkimer County's Soil Survey document. These are typically called prime farmland soils and soils of statewide importance. In general, locations south of the Mohawk River include some of Herkimer County's most productive farmlands. Specifically, the Towns of Winfield, Columbia, and Litchfield have an abundance of prime and statewide important soils, as well as a significant number of the county's farms. Additional areas of abundant prime soils include the Route 20 corridor (passes through southern parts of the county) and the Route 5 corridor along the Mohawk River.

The maps found in the Herkimer County Soil Survey are an excellent resource for farmland planning. These soils are digitized and available on GIS and also from the Web Soil Survey. This allows communities to be able to easily find and highlight the prime and important soils for use in site planning, grant writing, and to help target farmland preservation efforts. For the purposes of gaining a better visual representation of the county's agricultural soils, prime and important soils have been highlighted in green and red on the attached maps.

⁵ Figures from New York State Department of Agriculture and Markets, 2019.

Prime Soils

There are 83,016 acres of prime farmland. Prime farmland accounts for approximately 24.5% of all the mapped soils in Herkimer County. According to the NRCS, prime farmland soils are:

“...land that is best suited to the production of row, forage and fiber crops. Due to inherent natural characteristics such as level topography, good drainage, adequate moisture supply, favorable soil depth and favorable soil texture, this land consistently produces the most food and fiber with the least fertilizer, labor and energy requirements. Prime soils tend to be resistant to erosion and runoff.” Some of the following soil types are considered prime soils if drained.

ApA	Appleton silt loam, 0 to 3 percent slopes
BoB	Bombay very fine sandy loam, 3 to 8 percent slopes
BrB	Broadalbin loam, 2 to 8 percent slopes
BuA	Burdett silt loam, 0 to 3 percent slopes
CaB	Canton stony very fine sandy loam, 2 to 8 percent slopes
CsB	Conesus silt loam, 2 to 8 percent slopes
Fr	Fredon Fine sandy loam
He	Hamlin fine sandy loam
Hf	Hamlin silt loam
HgB	Hartland-Agawam complex, 3 to 8 percent slopes
HhA	Hartland gravelly silt loam, 3 to 8 percent slopes
HhB	Hartland gravelly silt loam, 3 to 8 percent slopes
HkB	Herkimer gravelly silt loam, moderately well drained, 0 to 4 percent slopes
HIB	Hilton silt loam, 3 to 8 percent slopes
HoB	Honeoye silt loam, 3 to 8 percent slopes
HuA	Howard gravelly fine sandy loam, 0 to 3 percent slopes
HuB	Howard gravelly fine sandy loam, 3 to 8 percent slopes
HvA	Howard gravelly silt loam, 0 to 3 percent slopes
HvB	Howard gravelly silt loam, 3 to 8 percent slopes
Lk	Lamson mucky silt loam
LoA	Lima silt loam, 0 to 3 percent slopes
LoB	Lima silt loam, 3 to 8 percent slopes
McA	Manheim silt loam, 0 to 3 percent slopes
MnB	Massena very fine sandy loam, 0 to 8 percent slopes
MoB	Mohawk silt loam, shale substratum, 3 to 8 percent slopes
OnB	Ontario silt loam, 3 to 8 percent slopes
PaB	Palatine silt loam, 2 to 8 percent slopes
PIA	Palmyra gravelly silt loam, 0 to 3 percent slopes
PIB	Palmyra gravelly silt loam, 3 to 8 percent slopes
PpB	Phelps gravelly fine sandy loam, 0 to 4 percent slopes
RaB	Raynham silt loam, 0 to 4 percent slopes

RbA	Rhinebeck silt loam, loamy substratum, 0 to 3 percent slopes
Te	Teel fine sandy loam
Ts	Teel silt loam
WaA	Wassaic silt loam, 0 to 3 percent slopes
WaB	Wassaic silt loam, 3 to 8 percent slopes
WIA	Williamson silt loam, 0 to 3 percent slopes
WIB	Williamson silt loam, 3 to 8 percent slopes

Lands of Statewide Importance

There are 79,731 acres of farmlands of statewide importance. These soils account for approximately 23.6% of all mapped soils in Herkimer County and are defined by NRCS as:

...land of particular state importance for the production of food, feed, fiber, forage, and oilseed crops. Generally these farmlands include those that are nearly prime and that produce high yields of crops when treated and managed according to modern farming practices. If conditions are favorable, some may product yields as high as prime farmland.

Aa	Allis silt loam
ApB	Appleton silt loam, 3 to 9 percent slopes
BoC	Bombay very fine sandy loam, 8 to 15 percent slopes
BrC	Broadalbin loam, 8 to 15 percent slopes
BuB	Burdett silt loam, 3 to 8 percent slopes
BuC	Burdett silt loam, 8 to 15 percent slopes
CaC	Canton stony very fine sandy loam, 8 to 15 percent slopes
FaC	Farmington silt loam, 0 to 8 percent slopes
HgB	Hartland-Agawam complex, 3 to 8 percent slopes
HmA	Hinckley gravelly loamy sand, 0 to 3 percent slopes
HmB	Hinckley gravelly loamy sand, 3 to 8 percent slopes
HoC	Honeoye silt loam, 8 to 15 percent slopes
HtA	Hornell silt loam, 0 to 3 percent slopes
HtB	Hornell silt loam, 3 to 8 percent slopes
HtC	Hornell silt loam, 8 to 15 percent slopes
HuC	Howard gravelly fine sandy loam, 8 to 15 percent slopes
HvC	Howard gravelly silt loam, 8 to 15 percent slopes
HyB	Hudson silt loam, loamy substratum, 2 to 8 percent slopes
HyC	Hudson silt loam, loamy substratum, 8 to 15 percent slopes
HyD	Hudson silt loam, loamy substratum, 15 to 30 percent slopes
In	Ilion silt loam
Is	Ilion and gun very stony silt loam
LaB	Lairdsville silt loam, loamy subsoil variant, 3-8 percent slopes
LaC	Lairdsville silt loam, loamy subsoil variant, 8 to 15 percent slopes

LnC	Lansing silt loam, 8 to 15 percent slopes
LoC	Lima silt loam, 8 to 15 percent slopes
LpB	Lockport silt loam, loamy subsoil varian, 0 to 4 percent slopes
McB	Manheim silt loam, 3 to 8 percent slopes
McC	Manheim silt loam, 8 to 15 percent slopes
MIB	Manlius shaly silt loam, 3 to 8 percent slopes
MIC	Manliums shaly silt loam, 8 to 15 percent slopes
MoB	Mohawk silt loam, shale substratum, 3-8 percent slopes
MoC	Mohawk silt loam, shale substratum, 8 to 15 percent slopes
MoD	Mohawk silt loam, shale substratum, 15 to 25 percent slopes
MsB	Mosherville very fine sandy loam, 2 to 8 percent slopes
OnC	Ontario silt loam, 8 to 15 percent slopes
PaC	Palatine silt loam, 8 to 15 percent slopes
PIC	Palmyra gravelly silt loam, 8 to 15 percent slopes
PmC	Palmyra and Howard soils, rolling
RbB	Rhinebeck silt loam, loamy substratum, 3 to 8 percent slopes
WaC	Wassaic silt loam, 8 to 15 percent slopes
Wd	Wayland silt loam
WIB	Williamson silt loam, 3 to 8 percent slopes
WnA	Windsor Loamy fine sand, 0 to 3 percent slopes
WnB	Windsor loamy fine sand, 3 to 8 percent slopes

Protected Lands

Outside of the Adirondack Park, there is very little National, State, or local public parkland in Herkimer County. There are two State Reforestation Areas in the Town of Stark, and another that straddles the boundaries of the Towns of Herkimer and Schuyler. Additional Reforestation Areas are in the Towns of Russia and the Town of Norway along its border with Ohio. The Lock 18 State Wildlife Management Area is found in the towns of Herkimer and German Flats (along the historic New York State Barge Canal). The Herkimer Home State Park straddles the border of Danube and Manheim. There are small local parks found in the Towns of Schuyler and Russia and the US Air Force operates the Newport Test Annex on two sites in the Town of Newport.

The preserved lands in Herkimer County include:

- # acres of NY State preserved lands = 373,571 acres
- # acres County owned/preserved lands = 9,566 acres
- # acres preserved by other organizations (land trusts, etc.) = 1,352 acres
- # parcels and acres preserved in total = 919 total parcels on 384,489 acres

Wetlands

According to the New York State Department of Environmental Conservation there are approximately 26,498 acres of state regulated wetlands in Herkimer County (outside of the Adirondack Park). This includes 5,070 acres of Class I wetlands, 17,497 acres of class II, followed by 2,198 acres of class III wetlands, 565 acres of class IV wetlands and 1,168 acres in uplands. For descriptions of each class please see the Department of Environmental Conservation web site:

<http://www.dec.state.ny.us/website/regs/ch10.htm>

NYS DEC regulated wetlands are at least 12.4 acres or, if smaller, have unusual local importance. In Herkimer County, major areas of wetlands can be found in several locations including: along the Mohawk River, along the border of Norway and Salisbury (near the Spruce Creek), in the southern section of the county in Columbia and Warren, and in the Towns of Litchfield and Frankfort (near Moyer Creek). In addition, the National Wetlands Inventory (NWI) includes an inventory of federally identified wetlands in Herkimer County. NWI wetlands smaller than the 12.4 acres regulated by the NYS DEC are found throughout Herkimer County. Some of those may be federally regulated wetlands through the US Army Corps of Engineers.

Floodplains

Flood plain boundaries are determined and mapped through the Federal Emergency Management Agency (FEMA). One hundred year flood boundaries delineate the flood elevation that has a 1 percent chance of being equaled or exceeded each year. A 500-year flood line shows the flood elevation that has a 0.2 percent chance of being equaled or exceeded each year. Overall, there is not a significant amount of flood plain area in the county. In general, the flood plains in Herkimer encompass the lands adjacent to the tributaries and streams as well as lands adjacent to many of the ponds and water bodies of the area. The largest contiguous area of floodplain is located along the Mohawk River and its tributaries. Other streams with significant areas of FEMA designated floodplain include the West Canada Creek, Spruce Creek, the Hinkley Reservoir, and the Unadilla River.

Watersheds and Drainage

Drainage is dominated by the Mohawk River, while a small area in the southwestern part of the county (Towns of Winfield, Columbia, and Warren) drains into the Susquehanna River system. The Mohawk River is the only major stream in the county flowing west to east. Other streams and tributaries are generally north-south oriented, leading into the Mohawk River.

Regulatory Framework in Herkimer County and Its Relation to Farming

Zoning and land development regulations for subdivisions and site planning have direct impacts on farmland and agricultural practices. Furthermore, these laws should be coordinated with an updated comprehensive plan that illustrates residents' desires regarding growth and quality of life. As part of the farmland protection plan, land use regulations were reviewed from each of the municipalities within Herkimer County. These towns and villages employ a variety of land use laws including zoning, subdivision regulations, and site plan review. Other regulations govern the placement of signs, adult entertainment, and mining uses.

The table below outlines the local land use regulatory picture in Herkimer County. Many communities in Herkimer County do not have comprehensive plans or zoning. For those that do have these planning tools, many are quite old. For a comprehensive plan to be an accurate snapshot of the community, it must represent the desires of its residents and to assist in the guidance of land development regulations it should be updated every five to ten years. Updated (or new) comprehensive plans would help the local governments better understand existing conditions, potential threats to quality of life, and the needs of residents, businesses and farms.

As shown in the Audit (See Part 2, Appendix D), some major farming towns in the County have not articulated their support for farming, or updated local land use regulations to be agriculture-friendly. Most agricultural or rural districts allow residential uses to mix with farmlands at relatively high densities (1-5 acre lots). Scattered growth at these densities typically results in loss of farmland, increases difficulty of farming, and loss of rural character. Furthermore, (according to the County Planning Department), there are no right to farm laws employed in Herkimer County although the elected officials survey indicated that there is widespread thought that such laws do exist.

The land use development regulatory framework in Herkimer County does not fully prioritize agricultural activities or the preservation of farmland. This includes those communities with and without zoning ordinances.

The following table identifies the various land use programs that currently exist in Herkimer County Towns. The four towns included in the audit (See Part 2, Appendix D) are highlighted.

Table 3. Planning and land use tools towns and villages in Herkimer County, March 2019.

MUNICIPALITY	Planning Bd	Comprehensive Plan	Zoning Ord.	Subdivision Regs	Site Plan Review	Wind Energy	Telecommunication	Sign Ord.	Available Online	Solar (within zoning or local law)
COLD BROOK (V)	N	N	N	N	N	N	N	N		
COLUMBIA	Y	Y(2018)	2015	Y	Y	N	Y	Y ¹	N	
DANUBE	Y	N	N	N	Y	N	Y	N	Y	
DOLGEVILLE (V)	Y	Y(1990)	1998	N	Y ¹	N	Y ¹	Y ¹	N	
FAIRFIELD	Y	Y(1992)	1999	N	Y	Y	Y ¹	Y ¹	N	
FRANKFORT (V)	N	Y(1965)	1994	N	N	N	N	Y	N	
FRANKFORT (T)	Y	Y(1965)	1990	Y	N	N	N	Y ¹	N	
GERMAN FLATTS	N	N	N	N	N	N	N	N	N	
HERKIMER (V)	Y	Y(1978)	1978*	Y	Y ¹	N	N	Y ¹	N	2002
HERKIMER (T)	Y	Y(1962)	2012	Y	N	Y	N	Y ¹	N	
ILION (V)	Y	Y(1965)	1976	Y	Y ¹	N	N	Y ¹	N	
LITCHFIELD	N	Y (2013)	1992	Y	N	Y	Y	N	Y	2017
LITTLE FALLS(C)	Y	Y(1970)*	2005	Y	Y ¹	N	N	Y ¹	N	

MUNICIPALITY	Planning Bd	Comprehensive Plan	Zoning Ord.	Subdivision Regs	Site Plan Review	Wind Energy	Telecommunication	Sign Ord.	Available Online	Solar (with zoning or local law)
LITTLE FALLS(T)	Y	N	N	N	Y	N	Y	N	N	
MANHEIM	Y	N	1996	Y	Y ¹	Y ¹	N	Y ¹	Y	
MIDDLEVILLE(V)	Y	N	1986	N	Y ¹	N	N	Y ¹	N	
MOHAWK(V)	Y	Y(1965)	2010	Y	N	N	N	N	N	
NEWPORT (V)	Y	N	1989	N	Y ¹	N	N	Y ¹	Y	
NEWPORT(T)	Y	Y (2011)	2016	N	Y ¹	N	N	Y	Y	
NORWAY	Y	Y(1992)	1995	Y	Y ¹	Y	N	Y ¹	N	
OHIO	N	N	N	N	N	N	N	N	N	
POLAND (V)	Y	N	1994	Y	Y ¹	N	N	Y ¹	N	
RUSSIA	Y	Y(2005)	2012	Y	Y ¹	Y	Y	Y ¹	Y	
SALISBURY	Y	Y(1993)	1996	Y	Y ¹	Y	N	Y ¹	N	2016
SCHUYLER	Y	Y(2019)	2000	Y	Y ¹	Y	Y	Y ¹	Y	2017
STARK	Y	Y(2002)	2004	Y	Y ¹	Y	N	Y ¹	N	

MUNICIPALITY	Planning Bd	Comprehensive Plan	Zoning Ord.	Subdivision Regs	Site Plan Review	Wind Energy	Telecommunication	Sign Ord.	Available Online	Solar (with in zoning or local law)
WARREN	Y	Y (2015)	N	Y	N*	Y	N	N	N	
WEBB	Y	Y(2002)	2013	Y	Y ¹	Y	N	Y ¹	N	
WEST WINFIELD (V)	N	N	1972	Y	N	N	N	Y ¹	N	
WINFIELD	Y	N	1973*	Y	Y ¹	Y	N	Y ¹	N	

1 Regulations included in zoning ordinance.

* In the process of updating/adoption

Appendix C: Public Input Results

Summary of Farmer/Farmland Owner Survey

- The survey represented farmers and farmland owners from throughout Herkimer County south of the Blue Line, with more concentrated in Schuyler, Herkimer, Columbia, and Winfield.
- Both farmers and farmland owners participated.
- Both new farmers and people who have been farming for a long time participated. There were more farmers who have been farming for >50 years that participated than newer farmers.
- The survey represents both small and large farms with the most common farm size being 100-200 acres owned.
- The majority of farmers do not rent large areas of farmland. Most rent less than 50 acres. There were just a few that rented large acreages. Most landowners who rent land to farmers have <100 acres rented.
- Hay, dairy and beef were the most common ag products represented in the survey, but all crops and products listed in the survey are grown by farmers who participated.
- Sales were through traditional channels via the wholesale milk market, farm stands and farmers markets and through wholesale businesses. A smaller number of farmers used less traditional outlets to sell products: There were just a few farmers who sold via CSA's, to restaurants, online, or to institutions.
- There was a generally positive perspective among the participants with most planning to diversify or increase/expand their farming operation in the next 5 years. A few were planning on decreasing their operation or selling land to another farmer, and a few planning to add direct sales. Given the current poor ag-economic climate, it seems positive that there are not a large number of farmers planning on exiting agriculture in the near future.
- Participants were asked what challenges they face on their particular farm.
 - a. The major issues challenging farmers include, in order, operational expenses, property taxes, low prices for products, cost of labor, health insurance costs, transportation costs, federal and state regulations, availability of labor, access to better markets, climate change, lack of processing and storage, and loss of farmland to non-farm uses.
 - b. Minor issues challenging farmers include, in order, difficulty of using farm equipment on roads, soil erosion/health, access to better markets, finding local supplies, local regulations, lack of processing and storage, lack of local knowledge of agricultural products, ag plastics recycling, adequate labor, and climate change.

(Note that some issues show up on both major and minor issue lists)

- Participants were asked what issues face agriculture overall in the County.
 - a. Major issues facing agriculture in the County in order include getting young people involved in agriculture, loss of farmland, access to better markets, limited support for agriculture in local economic development programming, lack of support for agriculture in the community, lack of communication and networking and climate change.
 - b. Minor issues facing agriculture in the County in order include limited agritourism, lack of accommodation for visitors and climate change.

(Note that some issues show up on both major and minor issue lists)

- The top three county-wide issues participants felt the plan should address include loss of farmland, getting young people involved in agriculture, and the limited support for agriculture in local economic development agencies and organizations.
- Top ranked strategies to address county-wide issues include in order, agriculture-friendly zoning and local laws, right to farm laws, educational programming for youth, increase ag-related events and activities, use conservation easements to protect farmland, and develop programs that increase demand for local ag products. There was also a lot of support for initiating programs that attract new farmers and agri-businesses, improvement of marketing and promotion skills, having a local dairy processing facility and having a local meat processing facility.
 - a. Out of those strategies, the top three strategies identified as important to include in the plan are: providing more educational programming for youth; developing a local dairy processing plant; and attracting new farmers and agri-businesses.

Detailed Farmer/Farmland Owner Survey Results

TOTAL RESPONSES = 112

* indicates the top response(s) to the question

Q1 Where is your farm or farmland primarily located? If multiple locations, pick the place you mainly operate from.

Answered by 109; skipped by 3 respondents.

- Top 3 locations: Herkimer (11.9%), Schuyler (11.0%); Winfield (10.1%), and Columbia (8.3%)
- Little Falls, Litchfield and Manheim (6.4% each)
- German Flatts (5.5%)
- Danube, Fairfield, Newport, Russia, and Warren (4.6% each)
- Frankfort (3.7%)
- Ohio, Salisbury, and Stark (0.9% each)
- No respondents selected Norway or Webb.

- *Other Town, City or Village* (4.6%). Write-in answers: TC; Richfield Springs; Town of Deerfield, Poland, and S/B/L.

Q2 Are you:

**A farmer and involved in an active farm operation that produces an agricultural product? OR
A non-farmer landowner that owns farmland but rents the land for production of an agricultural product but is not involved in an active farm operation.**

Answered by 109; skipped by 3.

- 62.4% farmers (68 respondents)
- 37.6% non-farmer landowners (41 respondents)

Q3 How many years have you been farming in Herkimer County?

Answered by 69; skipped by 43. (Note that those who skipped Q3 through Q13 are non-farmer landowners who would not need to answer this question.)

- 0-10 years (17.4%)
- 11-20 years (20.3%)
- 21-30 years (8.7%)
- 31-40 years (11.6%)
- 41-50 years (17.4%)
- 50+ years (24.6%)*

Q4 How many acres of land do you currently farm, and OWN yourself?

Answered by 68; skipped by 44.

- Less than 50 acres owned (13.2%)
- 51 - 100 acres owned (10.3%)
- 101 - 200 acres owned (36.8%)*
- 201 - 500 acres owned (20.6%)
- 500+ acres owned (19.1%)

Q5 How many acres of land do you currently farm, and RENT from someone else?

Answered by 60; skipped by 52.

- Less than 50 acres rented (55.0%)*
- 51 - 100 acres rented (15.0%)
- 101 - 200 acres rented (13.3%)
- 201 - 500 acres rented (11.7%)
- 500+ acres rented (5.0%)

Q6 What agricultural products do you grow or raise? (Check all that apply.)

Answered by 63; skipped by 49.

- Top 3 responses: Hay (63.5%), dairy cows (47.6%), beef cattle (39.7%)
- Grain and beans (28.6%)
- Vegetables (17.5%)
- Poultry and eggs (15.9%)
- Fruits and berries and timber products (12.7% each)
- Horses (11.1%)
- Sheep and goats (9.7%)

- Honey and maple products (7.9% each)
- Nursery and greenhouse products (4.8%)
- Christmas trees (1.6%)
- *Other* (6.4%). Write-in responses: dairy beef; pork; food plots for deer and turkey; sweet corn.

Q7 How do you currently sell your farm products? (Check all that apply.)

Answered by 61; skipped by 51.

- Top 3 responses: Through a milk processor or cooperative (42.6%); through a farm stand (19.7%); wholesale, for non-dairy operations (16.4%)
- Through a farmer's market (11.5%)
- Through retail outlets, e.g., grocery stores, garden centers, big box stores (9.8%)
- Through a CSA and direct to restaurants (6.6% each)
- Online, with products shipped to consumers, and direct to institutional buyers (1.6%)
- *Other* (29.5%). Top write-in responses: Direct to consumer (4 responses); auctions (3); wholesale direct to other farmers (3), to family & friends (2).
- Other write-in responses: Cattle dealer; Richfield Springs Area Farmers Market, private sales for hay; personal contact; distributors for regional distribution; Clinton, Old Forge, and Oneida Co. farmers markets; hay - word of mouth; fairs/festivals/events; feed mills individuals; Greenmarket, Union Square, NYC, NY; Old Forge, OCPM, Whitesboro; Hay/Craigslist/country folks paper.

Q8 Over the next five years do you intend to... (Check all that apply.)

Answered by 64; skipped by 48.

- Top 3 responses: Diversify your farming operation with new crops or value-added products (32.8%); increase or expand your farming operation (32.8%); none of the above (26.6%).
- Decrease your farming operation (15.6%)
- Add direct sales of products at the farm, and Transfer the farm to a family member (14.1% each)
- Sell or rent some of your land to another farmer (10.9%)
- Sell or rent all of your land to another farmer; and Lease your land for a solar facility (9.4% each)
- Develop agritourism activities, and Sell your land for non-farm uses (6.3% each)
- Transition to a new crop or commodity, and Donate or sell development rights through a conservation easement (4.7%)
- *Other plans for the future* (9.4%). Write-in responses: Thinking of wind generation; hopefully stay the same; stay the same; keeping the business the same; seeking plan to protect and preserve farm; unsure; we are not sure right now; the milk prices have been consistently low for too long... we may have to sell out if things do not improve.

Q9 Regulatory Considerations: How much of an adverse issue is each of the following to your farm?

Answered by 61; skipped by 51.

- Federal and state regulations: Major issue 41.7%*; Minor Issue 35.0%; Not an Issue 16.7%; Unsure if an Issue 6.7%.
- Local regulations such as zoning: Major issue 24.6%; Minor Issue 40.4%*; Not an Issue 33.3%; Unsure if an Issue 1.8%.
- Manure spreading restrictions: Major issue 16.4%; Minor Issue 27.3%; Not an Issue 52.7%*; Unsure if an Issue 3.6%.

- Labor regulations: Major issue 33.3%; Minor Issue 19.3%; Not an Issue 42.1%*; Unsure if an Issue 5.3%.
- Other regulatory considerations: Major issue 16.7%; Minor Issue 3.3%; Not an Issue 46.7%*; Unsure if an Issue 33.3%.
- Write-in responses: Low land values; weakening of certification standards especially pasture requirement; waterway protections; taxes and land use issues; doing any value added requires coping with more regulations in dairy; building code regulations barred us from using our barn in farm to table dining/agritourism; higher taxes, and regulations linked to "Certified Grown in NY" classification.

Q 10 Market Considerations: How much of an adverse issue is each of the following to your farm?

Answered by 59; skipped by 53.

- Access to better markets: Major issue 38.2%; Minor Issue 43.6%*; Not an Issue 18.2%; Unsure if an Issue 0%.
- Low prices for my product: Major issue 72.9%*; Minor Issue 17.0%; Not an Issue 8.5%; Unsure if an Issue 1.7%.
- Lack of marketing expertise and difficulty marketing products: Major issue 25.5%; Minor Issue 29.1%; Not an Issue 40.0%*; Unsure if an Issue 5.5%.
- Lack of processing and storage facilities: Major issue 32.2%; Minor Issue 37.5%*; Not an Issue 26.8%; Unsure if an Issue 3.6%.
- Local people don't know about the products that are available in the County: Major issue 26.8%; Minor Issue 37.5%*; Not an Issue 25.0%; Unsure if an Issue 10.7%.
- Online marketing and sales like Amazon/Whole Foods: Major issue 13.2%; Minor Issue 18.9%; Not an Issue 45.3%*; Unsure if an Issue 22.6%.
- Inability to access larger markets such as institutions (e.g., hospital, jail, schools): Major issue 18.5%; Minor Issue 9.3%; Not an Issue 51.9%*; Unsure if an Issue 20.4%.
- Other Market Considerations: Major issue 8.3%; Minor Issue 4.2%; Not an Issue 37.5%; Unsure if an Issue 50.0%.
- Write-in responses: There has not been ONE federal market change to benefit farmers; Local retail stores do not identify or carry local dairy or meat, much imported meat; Accessibility to crop experts that can provide equipment expertise and planting info; Monopoly of processor and milk coming from Texas into our county; We have limited markets for milk with a few large companies dominating the purchasing; Lack of a food hub to get products into NYC - most populous city in our country and we can't get our food there in Herkimer Co., and milk price is monopolized by large cooperatives.

Q 11 Cost Considerations: How much of an adverse issue is each of the following to your farm?

Answered by 61; skipped by 51.

- Cost of labor, including benefits, workers compensation, etc.: Major issue 52.5%*; Minor Issue 18.6%; Not an Issue 27.1%; Unsure if an Issue 1.7%.
- Operational expenses (e.g., cost of fuel, seed, fertilizer): Major issue 78.0%*; Minor Issue 18.4%; Not an Issue 3.4%; Unsure if an Issue 0.0%.
- Property taxes: Major issue 73.8%*; Minor Issue 21.3%; Not an Issue 3.3%; Unsure if an Issue 1.6%.

- Health insurance costs: Major issue 46.6%*; Minor Issue 32.8%; Not an Issue 17.2%; Unsure if an Issue 3.5%.
- Transportation costs: Major issue 42.9%*; Minor Issue 33.9%; Not an Issue 21.4%; Unsure if an Issue 3.5%.
- Other cost considerations: Major issue 36.0%* (tie); Minor Issue 0.0%; Not an Issue 28.0%; Unsure if an Issue 36.0%* (tie).
- Twelve written responses were entered. See survey results for details.

Q 12 Management and Financing Considerations: How much of an adverse issue is each of the following to your farm?

Answered by 58; skipped by 54.

- Availability of adequate labor: Major issue 39.7%*; Minor Issue 31.0%; Not an Issue 27.6%; Unsure if an Issue 1.7%.
- Finding local suppliers and agri-services: Major issue 20.7%; Minor Issue 41.5%*; Not an Issue 36.2%; Unsure if an Issue 1.7%.
- Access to affordable and productive farmland: Major issue 19.0%; Minor Issue 19.0%; Not an Issue 58.6%*; Unsure if an Issue 3.5%.
- Lack of broadband/Internet access: Major issue 25.0%; Minor Issue 28.6%; Not an Issue 41.1%*; Unsure if an Issue 5.4%.
- Difficulty finding technical and financial assistance: Major issue 17.5%; Minor Issue 24.6%; Not an Issue 50.9%*; Unsure if an Issue 7.0%.
- Access to financial capital: Major issue 14.0%; Minor Issue 36.8%; Not an Issue 45.6%*; Unsure if an Issue 3.5%.
- Transferring farm to the next generation: Major issue 12.5%; Minor Issue 30.4%; Not an Issue 50.0%*; Unsure if an Issue 7.1%.
- Difficulty transporting products from farm to market: Major issue 8.8%; Minor Issue 29.8%; Not an Issue 57.9%*; Unsure if an Issue 3.5%.
- Difficulty using equipment on roads: Major issue 15.5%; Minor Issue 46.6%*; Not an Issue 36.2%; Unsure if an Issue 1.7%.
- Conflicts with non-farm neighbors: Major issue 5.2%; Minor Issue 34.5%; Not an Issue 56.9%*; Unsure if an Issue 3.5%
- Other Management/ Financing considerations: Major issue 4.4%; Minor Issue 4.4%; Not an Issue 65.2%*; Unsure if an Issue 26.1%.
- Write-in responses: All are important; operating costs exceed our production costs. difficulty making capital investments into the business; we do not have a problem but many of our neighbors do, milk prices have really hurt them, and low mile price.

Q 13 Environmental Considerations: How much of an adverse issue is each of the following to your farm?

Answered by 58; skipped by 54.

- Water quality: Major issue 14.3%; Minor Issue 30.4%; Not an Issue 55.4%*; Unsure if an Issue 0%.
- Water quantity: Major issue 12.5%; Minor Issue 32.1%; Not an Issue 55.4%*; Unsure if an Issue 0%.
- Climate change: Major issue 35.7%*; Minor Issue 28.6%; Not an Issue 32.1%; Unsure if an Issue 3.6%.

- Soil erosion/health: Major issue 17.9%; Minor Issue 50.0%*; Not an Issue 32.1%; Unsure if an Issue 0.0%.
- Agricultural plastics recycling: Major issue 28.1%; Minor Issue 35.1%*; Not an Issue 29.8%; Unsure if an Issue 7.0%.
- Loss of farmland to non-farm uses: Major issue 33.3%; Minor Issue 28.1%; Not an Issue 35.1%*; Unsure if an Issue 3.5%.
- Other environmental considerations: Major issue 16.7%; Minor Issue 8.3%; Not an Issue 58.3%*; Unsure if an Issue 16.7%.

Q 14 How many acres of land do you currently own and rent for farming?

Answered by 35; skipped by 77. (Note that this question and Q15 were answered by the non-farmer participants.)

- | | |
|--|--------------------------------------|
| ▪ Less than 50 acres rented out (40.0%)* (tie) | ▪ 101 - 200 acres rented out (17.1%) |
| ▪ 51 - 100 acres rented out (40.0%)* (tie) | ▪ 201 - 500 acres rented out (2.9%) |
| | ▪ 500+ acres rented out (0.0%). |

Q 15 Over the next five years do you intend to...

Answered by 34; skipped by 78.

- Keep renting the same number of acres of land for farming (94.1%)*
- Decrease the amount of acreage to be rented for farming but some of my farmland will continue to be available for rent to farmers (0.0%)
- Stop renting all my land for farming activities (5.9%).

Q 16 How much of an issue is each of the following for the future of agriculture in Herkimer County?

Answered by 87; skipped by 25.

- Access to better markets: Major issue 57.3%*; Minor Issue 26.8%; Not an Issue 8.5%; Unsure if an Issue 7.3%
- Limited agritourism opportunities: Major issue 24.1%; Minor Issue 43.4%*; Not an Issue 25.3%; Unsure if an Issue 7.2%.
- Lack of communication, networks, and connections among farmers: Major issue 42.2%*; Minor Issue 34.9%; Not an Issue 16.9%; Unsure if an Issue 6.0%.
- Getting young people interested in farming: Major issue 78.6%*; Minor Issue 15.5%; Not an Issue 6.0%; Unsure if an Issue 0.0%.
- Loss of farmland: Major issue 64.7%*; Minor Issue 23.5%; Not an Issue 11.8%; Unsure if an Issue 0.0%.
- Large scale solar farms: Major issue 17.3%; Minor Issue 29.6%; Not an Issue 38.3%*; Unsure if an Issue 14.8%.
- Limited support for agriculture by local economic development agencies and organizations: Major issue 51.8%*; Minor Issue 37.7%; Not an Issue 7.1%; Unsure if an Issue 3.5%.
- Lack of adequate accommodations for visitors: Major issue 9.8%; Minor Issue 39.0%; Not an Issue 41.2%*; Unsure if an Issue 9.8%.
- Lack of support for farming in the community: Major issue 49.4%*; Minor Issue 29.4%; Not an Issue 18.8%; Unsure if an Issue 2.4%.

- Climate change: Major issue 36.6%*; Minor Issue 26.8%; Not an Issue 30.5%; Unsure if an Issue 6.10%.

Q 17 What do you feel are the top three issues (from the strategies suggested in the question above) to be addressed in the updated Herkimer County Agricultural and Farmland Protection Plan?

Answered by 86; skipped by 26.

Top responses (selected by at least 30%):

Loss of farmland and conversion of farmland to non-farm uses	53.5%
Getting young people interested in farming	51.2%
Limited support for agriculture by local economic development agencies and organizations	48.8%
Access to better markets	37.2%
Lack of support for farming in the community	36.1%

Q 18 Do you think more should be done in the County to preserve farmland?

Answered by 88; skipped by 24.

Yes	80.9%*	Unsure	12.5%
No	6.8%		

Q 19 Do you think more should be done in the County to promote and market agricultural products?

Answered by 88; skipped by 24.

Yes	88.6%*	Unsure	9.1%
No	2.3%		

Q 20 Do you think that there are enough agricultural economic development programs being conducted in Herkimer County?

Answered by 88; skipped by 24.

Yes	10.2%	Unsure	28.4%
No	61.4%*		

Q 21 The following are potential strategies related to education that could improve farming in the County. How important do you think each one is to enhancing agriculture in Herkimer County?

Answered by 86; skipped by 26.

- More educational programming for youth about farming: Very important 65.9%*; Somewhat important 27.1%; Not important 3.5%; Unsure 3.53%.
- Create a youth/farmer mentoring program: Very important 45.4%; Somewhat important 47.7%*; Not important 3.5%; Unsure 3.5%.
- Develop and coordinate farm internship opportunities: Very important 42.4%; Somewhat important 52.9%*; Not important 2.4%; Unsure 2.4%.
- Expand Cornell Cooperative Extension programming: Very important 51.2%*; Somewhat important 34.9%; Not important 8.1%; Unsure 5.8%.

Q 22 The following are potential strategies related to Marketing and Promotion that could improve farming in the County. How important do you think each one is to enhancing agriculture in Herkimer County?

Answered by 87; skipped by 25.

- Initiate programs that attract new farmers and agri- businesses to the County: Very important 59.3%*; Somewhat important 34.9%; Not important 5.8%; Unsure 0.0%.
- Establish first-time farmer programs: Very important 47.7%*; Somewhat important 43.0%; Not important 5.8%; Unsure 3.5%.
- Improve marketing skills and programs to boost sales of local farm products: Very important 55.4%*; Somewhat important 33.7%; Not important 7.2%; Unsure 3.6%.
- Create a local brand for Herkimer County products: Very important 31.8%; Somewhat important 47.1%*; Not important 15.3%; Unsure 5.9%.
- Enhance farmers markets to reach more people: Very important 42.9%; Somewhat important 45.2%*; Not important 8.3%; Unsure 3.6%.
- Encourage local retailers to sell more local agricultural products: Very important 67.1%*; Somewhat important 31.8%; Not important 0.0%; Unsure 1.2%.
- Increase agricultural-related events and festivals like the Little Falls Cheese Festival: Very important 63.9%*; Somewhat important 28.9%; Not important 4.8%; Unsure 2.4%.

Q 23 The following are potential strategies related to Ag-Economic Development that could improve farming in the County. How important do you think each one is to enhancing agriculture in Herkimer County?

Answered by 85; skipped by 27.

- Promote more farm-based beverages (brewery, winery, cidery): Very important 25.0%; Somewhat important 48.8%*; Not important 23.8%; Unsure 2.4%.
- Expand Farm-to-Table programs to enhance sales of local products: Very important 47.1%* (tie); Somewhat important 47.1%* (tie); Not important 3.5%; Unsure 2.4%.
- Establish programs that increase local demand for and use of local products: Very important 61.2%*; Somewhat important 36.5%; Not important 1.2%; Unsure 1.2%.
- Establish a local dairy processing plant: Very important 54.1%*; Somewhat important 24.7%; Not important 15.3%; Unsure 5.9%.
- Establish a food preparation facility for vegetables and other food crops: Very important 48.8%*; Somewhat important 33.3%; Not important 13.1%; Unsure 4.8%.
- Establish meat processing facility (large and small animal): Very important 52.9%*; Somewhat important 24.7%; Not important 16.5%; Unsure 5.9%.
- Promote farm stays and other agri-tourism efforts: Very important 21.4%; Somewhat important 58.3%*; Not important 16.7%; Unsure 3.6%.
- Develop more programs to support small, niche and specialty-crop farms: Very important 21.4%; Somewhat important 58.3%*; Not important 16.7%; Unsure 3.6%.
- Have transportation and distribution programs for local products (like a food hub): Very important 36.9%; Somewhat important 41.7%*; Not important 14.3%; Unsure 7.1%.

Q 24 The following are potential strategies related to Farmland Protection that could improve farming in the County. How important do you think each one is to enhancing agriculture in Herkimer County?

Answered by 84; skipped by 28.

- Use conservation easements to protect farmland: Very important 62.7%*; Somewhat important 27.7%; Not important 8.4%; Unsure 1.2%.
- Pass right to farm laws at the town level: Very important 66.7%*; Somewhat important 25.0%; Not important 2.4%; Unsure 6.0%.
- Promote agriculture-friendly zoning and local land use laws: Very important 75.9%*; Somewhat important 20.5%; Not important 1.2%; Unsure 2.4%.

Q 25 The following are potential strategies related to On-Farm Enhancements that could improve farming in the County. How important do you think each one is to enhancing agriculture in Herkimer County?

Answered by 84; skipped by 28.

- Change laws regarding hiring youth on farms: Very important 36.1%; Somewhat important 47.0%*; Not important 10.8%; Unsure 6.0%.
- Have farm-business planning programs: Very important 32.5%; Somewhat important 57.8%*; Not important 2.4%; Unsure 7.2%.
- Have farm transfer and succession programming: Very important 45.8%* (tie); Somewhat important 45.8%* (tie); Not important 6.1%; Unsure 2.4%.
- Promote use of renewable resources (biodiesel, solar, wind) on farms: Very important 36.1%; Somewhat important 44.6%*; Not important 14.5%; Unsure 4.8%.
- Initiate more programming to help farmers address climate change: Very important 26.5%; Somewhat important 38.6%*; Not important 27.7%; Unsure 7.2%.

Q 26 What do you feel are the top three most important strategies or programs (from the strategies suggested in the question above) to include in the updated Herkimer County Agricultural and Farmland Protection Plan?

Answered by 85; skipped by 27.

Top responses (selected by at least 20%):

- More educational programming for youth about farming 25.9%
- Establish a local dairy processing plant 21.2%
- Initiate programs that attract new farmers and agri-business to the County 20.0%

The county-wide strategies receiving support from less than 5 participants were:

- Enhance farmers markets to reach more people
- Encourage local retailers to sell more local agricultural products
- Increase ag-related events and festivals
- Promote more farm-based beverages (brewery, winery, cidery)
- Have transportation and distribution programs for local products like a food hub
- Change laws regarding hiring of youth on farms
- Have farm business planning programs
- Initiate more programming to help farmers address climate change

Focus Group Results

Ag Tourism/Niche Agriculture/Specialty Agriculture

Attendance:

Fred Shaw, Bernard Peplinski, Jayne Ritz, Gail Rochette, Sue Huber, Colleen Smith, Michele Hummel, Mike Reese, Jim Manning, Suzie Jones (representing Garlic Festival, Herkimer County Chamber of Commerce, several family farm operations, Mohawk Valley REDC, Old Forge Farmers Market, County Legislature)

Current agri-tourism activities

- Little Falls Garlic Festival: very successful event for 18 years. Has ~100 vendors/producers, mostly from within NYS
 - Local foods incubator group has grown out of the festival – interested in developing a commercial kitchen and creating a not-for-profit that would serve as an umbrella for the farmers market
- Little Falls Cheese Festival
 - Held the 2nd Saturday in July
 - This will be its 5th year
 - Has a lot of support from local officials
 - Producers come from both within and outside Herkimer County – great exposure
 - Customers come from CT, MA, NYC, PA
- 4-county Cheese Trail with Madison, Oneida, and Otsego counties being launched; Herkimer County Chamber of Commerce to advertise and promote it
- Some u-pick operations – berries, apples
- Juliano’s – busy farm stand with u-pick operation that can be seen from the Thruway (one of what used to be 6 such operations along the Route 5 corridor)
- Farmers markets
 - Old Forge Farmers Market is very popular in the summer
 - Young residents in Old Forge want local products, but it’s difficult during the winter months because the population is so small
 - Mohawk Valley has a lot more farmers markets than 10 years ago, but the Utica newspaper says “they’re over”
 - Farmers may be spread too thin
 - Trend toward people wanting pesticide-free, organic, and local agricultural products
 - Most people running farmers markets are volunteers; could use funding for paid staff
 - Would be great to have something in Herkimer County like the very successful indoor farmers market in Jefferson, PA (south of York) – it operates 6 days a week and carries items you can’t buy locally
- Jones Family Farm – likes having events on the farm to strengthen ties with local consumers

Niche/specialty agriculture

- Beardslee Water Buffalo Company – start-up meat/dairy operation; sells milk wholesale, wants to retail the meat
- Jones Family Farm - produces cow's milk cheese, goat cheese, and ice cream using milk from local farms; also has a slaughterhouse
- Distribution is an issue
 - Jones Family Farm sells its fresh cheeses to restaurants
 - Other local products are sold at the co-op, on the farm, in farmers markets, or in small, local, independent stores
 - Too challenging to get local product into grocery chains
 - Distribution is especially difficult for small producers: they have a hard time leaving the farm to get their product out, don't have the staff to go to all the farmers markets
 - Very daunting for traditional farmers to market and package products

Support for agriculture

- Institutions like Herkimer County Cooperative Extension should recognize farms beyond dairy – more support for diversification is needed
- Town assessors need to get on board
- State Ag & Markets has been supportive, wants to see local farms succeed
- Example of a local farm that had a Mother's Day brunch in their barn – local officials said it was fire hazard. Code enforcement officers should work with us to figure out how to make it work
- Need support for small gardens at the municipal level
- Towns and villages should be as ag-friendly as possible; county leaders should encourage them
- Use the updated Ag Plan as a "reminder"

Agriculture and economic development

- Mohawk Valley REDC works mainly with agribusinesses
 - Has helped Fage expand, has helped craft breweries get grants
 - Offers capital grants to finance hard assets (e.g., land, buildings, equipment)
 - No funding available for working capital or marketing (other than I Love NY funding, which has a \$60,000 minimum)
 - Does not do much with microenterprises
- How do we develop on-farm businesses? An economic development challenge – maybe the IDA could have an ag economic development specialist on staff to work with interested farmers
- IDA is committed to agriculture, but what resources can they actually bring?
- Economic development funding is typically for job creation, can be hard for farms to access
- Issue of sustaining food incubators – hard to find someone to operate and manage
- Consumers interested in convenience; some farms [outside Herkimer County] are doing small- to medium-scale processing on the farm, selling pre-cut vegetables, for example, but not sure if that's feasible here

Opportunities

- Feels there are opportunities here for local food; need workshops on supporting farms and small-scale food businesses
- Need an organized effort to develop and market a Mohawk Valley brand and an organization to promote it. Vermont does a great job selling Vermont-branded food products
- Agri-tourism enhancement and expansion
 - Local foods map in process of being updated, but how many farms on the list are ready for people?
 - Product could be used more effectively; currently it's online as a PDF, but print materials become outdated very quickly. Consider an interactive map online
 - Farms should set days and hours – can't have an open door policy – provide farmers with advice on dealing with customers
 - Otsego, Schoharie, and Madison Counties have Family Farm Days once a year when farms are open to visitors – maybe we should do that in Herkimer County, as it's more manageable

Future of agriculture in Herkimer County

- May not be animal-based – what if “dairy alternatives” are the future?
- Mohawk Valley regional effort – get funding to market products made in the 6-county region
- Tourism: Travelers want to get good food; also young people moving back eat local and are looking for products
- Help farmers be more transparent with the consumer – all types of farms need to tell their story
- No bed tax in Herkimer County, but if there was one, it could be used to fund tourism activities; County not taking advantage of matching funds available from the state
- Experiential activities to connect with consumers is big – great quality of life here
- Continue to see innovations in agriculture: people diversifying, making new products, becoming more entrepreneurial to succeed, or working together
- We depend on farms for food – they need help with marketing, processing, and distribution; support them along the way
- Likes idea of a Mohawk Valley brand
- Co-op idea to aggregate local ag products is worth considering – develop cooperative businesses
- Farm-to-school and farm-to-institution should be part of economic development; NYS providing more money to schools that purchase local products
- Facebook: Farm-to-School Mohawk Valley is doing a lot through BOCES
- Thinks we'll have 50% fewer dairy farms a decade from now
- What about a facility that helps clean up the vegetables, or a small dairy plant? Should distribute the product as well. Consider as a model that Vermont Food Venture Center, a shared use food hub and business incubator in Hardwick, VT
- Dairy farms must sell a unique product direct to the consumer, or grow

Vision and Future of Agriculture in Herkimer County

- Get money to market greater Mohawk Valley products

- There is a Mohawk Valley brand.
- Lots of tourism
- People want good local food and know where to get it
- Young people move and live here, eat locally and drive how agriculture will look locally
- Farmers are transparent with food products and do a better job of telling their story better.
- Farming is supported with programs and funding (maybe through a bed tax) to fund agri-tourism.
- County takes more advantage of the I Love NY program dollars.
- People recognize that agriculture adds to the quality of life here and we promote that.
- There is an innovation in agriculture, diversification, changing operations and more entrepreneurship.
- Farmers are helped to develop businesses, distribution, and marketing and training is available.
- Farmers work together to get the job done.
- Co-ops are here
- Agriculture is more year-round
- More emphasis on farm to school and farm to institution programs

Ag Businesses, Consultants, and Services

Attendance:

Herkimer County IDA, Herkimer/Oneida County Planning, Otsego Land Trust, NY Farm Bureau, Local ag businesses, Herkimer SWCD, Herkimer County Fair, HOCTS MPO, NBT Bank, County Legislature)

Trends in farming in Herkimer County

- Poor economy
- Fewer large operations
- Smaller farms getting bought out by larger ones
- More Amish operations
- Seeing saturation of milk [market], which has caused low prices for dairy
- Increasing interest in diversification
- Influx of smaller (5-10 acre) hobby farms
- In Town of Fairfield, some Amish leaving, going to Delaware County, and being replaced by Mennonites, who use machinery and electricity... but still many Amish in Newport, Litchfield, Columbia, etc.
- Otsego Land Trust reports interest by farmers in conservation easements, which can help make operations more financially stable, but there's not enough money or capacity to manage
- Dairies being affected by low milk prices; some going to beef
- Interest in alternative crops like industrial hemp and hops

Recent projects and initiatives

- Herkimer Co. Fair installing a new vacuum system for milkers
- County IDA looking at putting in a meat processing facility in Manheim once public water and sewer are in place
 - Processing facility requires volume of product
 - NIMBY-ism derailed a proposed meat processing plant a couple of years ago
 - Access to meat processing here is critical – can be year-round, generate jobs
 - County has great sewer plant and water capacity to support food processing
 - The Auburn area has a facility that can spiralize vegetables – using non-local crops off season, trying to maximize the use of its equipment
- Businesses getting involved with the Cheese Trail, a regional effort
- IDA setting up a meeting with the Oneida Nation; they are interested in local products
- SBDC has an ag specialist at the Mohawk Valley ThINCubator in Utica: can help with the development of business plans for farmers who want to get into value-added activity

Issues and needs

- Farmers who want to do value-added production don't know how to transition and market that product
- Farm transition – most farms don't have a transition plan; “offspring have been seen the checkbook”; no next generation to farm
 - Issue of how to get younger generation into farming
 - Need solid business plan for future
 - FarmNet/FarmLink has consultants who can help with transitioning
- SWCD has a lot of turnover due to low salaries, and doesn't have a Certified Nutrient Management Planner; CCE has one, but he/she covers 7 counties
- Need for engineers to handle manure storage, pumping plant systems
- Good supply of custom harvesters, feed and equipment dealers, but may need to travel further to reach some of them
- Traditional attitudes among farmers – want to be independent
- Farmers concerned about their ability to make a living for their family
- Locals buy at big box, grocery, and convenience stores – it's cheaper and more convenient than going to farmers markets
- Need to educate the public about the importance of agriculture
- Potential for industrial hemp, which has been legal in NYS for 3 years, but no processor; banks can't lend unless it's through a state-chartered institution
- Need for better promotion: let people know about local agriculture/farms beyond dairy, more diverse
- Hiring an Ag Implementation Specialist is critical
 - Otsego County has a committee with agencies and farmers that directs the activities of a part-time ag person hired to advance the Ag and Farmland Protection Plan; the position is housed at CCE, but County pays for it
 - Need a point person to implement the plan

- Keep the plan out there by making it available to the public online
- A food hub would be good for the area as farmers look to diversify
 - Amish in Montgomery County have set up an auction house in the Town of Minden where grocers can purchase products; only Amish can sell, but anyone can buy

Future of agriculture in Herkimer County

- IDA ag person to talk to others, coordinate what we need – under the IDA, would have momentum and support
- Grand opening of a meat processing plant within a year!
- Get the plan out there
- Local/societal change, working together instead of against each other, sharing resources
- Wants to see collaborative effort between local, state, and federal partners to bring a food hub to the area
- Agriculture in New York is changing, it's no longer primarily dairy – need to understand and capitalize on that; educate the producer, consumer, and middleman
- Ideally, we get most of our food grown/processed locally – positive impact on other local industries

Dairy and Livestock Focus Group

Attendance:

Fred Shaw, Dixie Barton, Mike Clements, Deb Windecker, David Balbian, Pete Campione, Lorraine Lewandrowski, Jim Entwistle, Guy Sassaman, Edward Shaver, Richard Becker, Les Miller, Bernard Peplinski

Positive Features of Farming in Herkimer County

- Soils/good soils
- Good access still available to a variety of ag-businesses to support farms – there is still the infrastructure here for farming
- Lots of grass and water – all are here; clean water
- Close to NY and Boston urban markets
- Close to Thruway
- Good conditions for forage based agriculture – this is the best area around for cows
- Still #1 industry in Herkimer County
- Lots of positive things happening in county related to agriculture – such as ag education in the schools; agricultural education is getting great again
- Cheap farmland compared to other locations
- SWCD programs exist and benefit farmers
- It is our home!
- County has beautiful landscapes
- Wildlife habitats
- Climate is good for agriculture (no droughts) – we are resistant to drought

- Erie Canal – historically transported cheese to NYC
- Amish and Mennonite farmers
- Farms bring in more money in taxes than the municipalities give out in services. There is a large multiplier effect for dairy especially that needs to be promoted better.

Negative Features of Farming in Herkimer County

- Prices for products are low
- There is some development pressure
- Solar facilities are taking good farmland
- Labor difficulties – unfair farm worker labor bill/legislation will hurt farmers; workers compensation
- Taxes are high
- No nearby large animal veterinarians
- Road updates have not kept up with bigger equipment. Hard to bring equipment on roads; people driving today makes traveling with farm equipment not safe
- Compliance with CAFO – more and more farms will be under those regulations, which are difficult
- No nutrient manager for Herkimer County
- Cost to put produce in storage is a moderate to fairly moderate problem
- Conflicts with non-farmers over manure spreading/smells/management
- Young people don't want to work hard anymore
- Old farmers – aging farm population
- FSA is being cut
- DFA/Agri-Mark are taking everything over. Need to grow more diversity – it is a monopoly and they are interested in cheap food only. The cheap food policy hurts farmers.
- Federal level – nobody speaks up at any level to advocate for farmers – Milk needs to be produced here and in NE, not western US
- Agriculture has no voice with supervisors, legislators, general public. Need education of these individuals as the first order.
- Competition with alternative beverages – a local, regional, state, U.S. and international problem
- No infrastructure for beef
- Can't compete with Wal-Mart
- Animal rights activist groups
- Some feel that there will be no farms left in 10 years

Opportunities to Improve Dairy and Livestock

- Hire a nutrient management person
- Cooperate with other counties to have personnel to implement programs, with the caveat that there is risk that shared services will short-change the County.
- Change the perspective on farming – need to promote and help people understand the NE is the place for milk production

- Have regional dairy processing. Although some felt this was not realistic and that there were not likely investors to make this happen.
- Have locally branded milk
- Promote Herkimer County as having food 'right in our backyard' – the dollars will stay here and with little extra cost involved for the farmer. Emulate the Ronnybrook model.
- Encourage climate for more opportunities to happen via services, education, funding, and support.
- Change attitudes to embrace aggressive support of farms from an economic perspective.
- Need to reduce the number of cows – move towards dairy beef and have a program to market cull cows collectively. See Slate Foods – good quality cull cows
- Start regional incentives for Farm to School improvements/enhancements
- SUNY Cobleskill artisan dairy processing
- Develop a regional brand image. Branding a Central NY or Mohawk Valley theme is important. Find an image that people can relate to – will need to be a multi-county effort
- A test creamery
- Emulate some of the dairy initiatives seen in Central NY
- Connect urban kids to Market NY
- We have something to market and we need to learn how to promote it
- Have a regional food hub
- Have a pilot program that decreases taxes for young farmers. Or develop other incentives for starting farmers.
- Advertise/market local foods more
- Get whole milk in area schools.
- Legislators should speak to ag processors. Law makers need to change the cheap food policy. They also need to revise the milk price formula.
- There needs to be rules of engagement between farmer and processor. Currently there are none and terms of contracts often do not benefit the farmers.
- Convey the positive role farming has on the local economy – stress that farms bring in more tax dollars than are spent – ag brings money into the area.
- Work with Hannaford, Price Chopper and other similar stores to market NYS ag products with better signage promoting local foods.
- Fund the Dairy Transition Program.
- Provide for grant writing services so that SWCD, CCE and others can take advantage of the grants that are out there. Currently there is no capacity to write grants. Need capacity building.
- Pasture more cows and sell this as the image of Herkimer County.
- Promote pasture dairy operations - Pastured cows make better cheese too – need to take more advantage of the grass and grazing opportunities in the Count.
- Promote small, niche farming. Small niche farms can over time grow to become bigger farms. There needs to be more support/education to diversify or start new niche farms. These won't be dairy but could be small cheese makers supported by the remaining dairy farms.
- Take steps to preserve what we have, steps to encourage new start-ups.

- Preserve good farmland for agriculture when solar facilities are proposed. Small solar projects are OK, but they shouldn't take up prime lands. They may be helpful for cash flow on a farm. However, not all participants felt solar facilities will benefit the landscape.
 - Solar could diversity farms if they are done in conjunction with compatible uses such as bees, sheep or plants that do well in shaded conditions.
 - Local laws and approvals should require an existing plan/decommissioning plan

Future/Vision for Agriculture

- There will be less dairy, a few big dairy farms and more niche farms
- More ag education will be the key to grow new farmers
- The general public will be more educated about agriculture and its role in the County
- There will be unique niche farms and several large farms that will support the quality of life desired in the County
- We will re-educate how we grow our food
- We will effectively use the CFA and other funding sources
- Preserve what we have
- The future is small farming.

Ag Educators Focus Group

Attendance:

Bernie Peplinski, Keith Schiebel, Rina Douglas, Guy Sassaman, Jennifer Collins, Linda Robbins, Katie Whitcomb, Kiley Treen

Trends in Ag Education in the County

- Years ago all schools had FFA and Ag Programs. Then BOCES. Schools need to have a certified Ag Teacher, a curricula on agriculture, and offer supervised ag experiences for students in order to have an Ag education program. Mt. Markham and BOCES has the charter, but not active. Richfield Springs is about to be approved. Herkimer is trying, and West Canada and Owen D. Young is reaching out and inquiring about it. Old Forge is working on curricula for elementary school. There are 11 school districts in the County.
- Ag in the Classroom is available but not used.
- 4-H goes into all the schools. 4-H is doing well. They are very traditional club-based. A large program is the livestock auction which promotes entrepreneurship.
- Offer Safety Day for 5th grade. 640 students participate.
- 4-H does tractor safety program
- NYCAM is involved in the County.
- Farm Progress Show
- BOCES has Farming Your Future program at HC Fair for middle school to expose careers in Ag
- Not much ag education at Herkimer College – can't get students to fill it. They are trying to work out programs with BOCES.

- BOCES has good basics but needs support network to make it better.
- Lots of cooperation between SWCD and BOCES.

Strengths

- Ag education is spreading to more upstate schools and more interest in schools again. 4 years ago there was no ag education – now in 5 of 11 school districts.
- Recognition in schools that ag teaches so many skill sets. More recognition that there is value in ag education.
- Farm Progress Show – is a grassroots effort to promote ag.
- Farming the Future BOCES program.

Issues

- BOCES labeled ‘Ag Program’ is not good – fosters bad attitudes and ‘people don’t want to be in production agriculture’. It should be labeled ‘food production’.
- Need to address that agriculture is hard to connect with both youth and adults. Need all levels of education.
- No time in school schedule in 9th grade to continue ag education that may have started in middle school.
- To get in FFA a student needs to be in an ag class.
- Barriers include:
 - Teaching administrators about ag and food systems
 - Adults need an open mind
 - Administrative restrictions such as insurance and liability
 - Need to education people how to do the programs
 - Guidance departments track kids out of ag and there is lack of understanding of ag careers
 - Stigma in schools
 - Ag has been used in past as ‘dumping ground’ to get kids graduated which contributes to stigma
- Farmers are not always aware of ag programs
- There is a shortage of home, careers and tech teachers. Ag fills that so many schools see Ag Programming in this light.

Opportunities

- The general public is interested in local food. Take advantage of this.
- Ag education fills technology program needs in curricula
- Promote dialogue among all groups
- Bring students to Fair/FFA booth to talk to public about ag
- Do more public events – ag ties everything together
- Initiate a program like Oneida County (Dairy Sustainability Plan)
- Partner with others to make things happen such as hold a forum about role of ag in the county and invite all 11 superintendents

- Promote one person at each school to be an ag champion to foster that understanding with teachers, administrators, students and parents
- County can do forums and bring people together.
- Partner with Oneida County more
- Money talks – there are grants for ag education that schools can get. Build partnerships to get state grants to promote ag education.
- Have a committee to communicate and network with schools and make local connections.
- Involve FFA Alumni in these programs
- Invite educators to Farm Progress Show – someone from each Board of Education needs to be there to see and learn.
- Sponsor students to attend the NYS FFA Convention. State FFA Alumni can sponsor scholarships.
- Emulate Hamilton High School program started by their Ag Teacher – Thank a Farmer Gift Boxes

Vision for the Future

- Ag education is growing and the public is aware and youth are educated
- Recognition that the beauty of the valley is tied to farming. We must retain farming in order to have a rural landscape.
- People are using the land
- There is a focus on culinary and food production
- Farmland is available for production agriculture
- Young adults are coming back to the area and starting their own farms
- There is unity in all sectors – legislators/ag education, etc. all community members are involved

Elected/Appointed Officials Survey Results

- 16 Towns responded (German Flatts, Frankfort, Columbia, Winfield, Little Falls, Schuyler, Manheim, Russia, Fairfield, Webb, Mohawk, Newport, Norway, Poland, Salisbury, Warren).
- 3 Villages wrote letters indicating they did not have agriculture within their boundaries as explanation as to why they did not fill survey out. Four people from Dolgeville responded.
- 41 Individuals total (1 with town not identified) including county legislators and town elected officials.

Question and Answers:

2. Agriculture was identified as contributing to the towns in many ways. Most people recognized all the options as important roles that agriculture plays. However, the top responses were that ag contributes to general property taxes (78% of participants) and contributes to rural character/rural lifestyles (90%). Other responses were (in order from most to least): Making local foods available (76%), and providing jobs (68%), followed by providing wildlife habitat (68%), scenic value (68%), cultural heritage (61%), generation of sales tax (49%), and bringing in tourists (27%). The low percentage of elected officials that feel farms bring in tourists probably reflects that agri-tourism is not a large component of the farm economy in Herkimer County.
3. Nine towns indicated they did have agritourism activities (Warren, Litchfield, Frankfort, Winfield, Little Falls, Schuyler, Manheim, Fairfield, Newport) in their town while 7 indicated they do not have these activities. *(Note - It is possible that participants were not aware of all agri-tourism activities that may be taking place in their community.)*
4. Participants were asked to identify the top three challenges they felt farms faced in their town. These were, in order of most frequently cited challenge to least frequently cited:
 - a. Low prices for farm product (especially milk and beef) (mentioned 26 times)
 - b. Labor costs and lack of workers (mentioned 15 times)
 - c. Cost of equipment and production costs (mentioned 11 times)
 - d. Taxes (mentioned 8 times)
 - e. Regulations (mentioned 5 times)
 - f. Other challenges mentioned by one person each include:
 - i. Governor Cuomo
 - ii. Water
 - iii. Weather/short growing season
 - iv. Farming is 7 days a week
 - v. Roads
 - vi. Lack of ag support businesses
 - vii. Poor market
 - viii. Solar farms
 - ix. Suburban type neighbors

- x. Large cooperative farms putting small farms out of business
 - xi. Lack of family members who want to continue farming
 - xii. High utility rates and taxation
 - xiii. Monopolies on markets
 - xiv. Expense getting started
 - xv. Culture changes away from family farms
5. Participants were asked what type of programs or policies were in place in their town that promotes or protects farmlands. Their answers were (in order by number of towns):
- a. Town allows farm stands and roadside stands (12 towns)
 - b. A right to farm law is in place (11 towns⁶)
 - c. Agricultural uses are allowed in more than one zoning district (8 towns)
 - d. Agriculture is addressed in municipal comprehensive plan (4 towns)
 - e. Don't know what is in place in town (5 towns)
 - f. Allow for clustered or conservation subdivisions (2 towns, Manheim and Fairfield)
 - g. Allow for agricultural uses of preserved open spaces (2)
 - h. Tax incentives offered other than the NYS agricultural assessment program (1, Schuyler)
 - i. Have a Town Ag Advisory Committee (1, Manheim)
 - j. Have a local purchase of development rights program (1, Manheim)
 - k. Require buffer zones between farmland and residential uses (0)
6. Eleven towns have farmers on either their Town Board, Planning Board or ZBA (Poland, Norway, Warren, Litchfield, Frankfort, Columbia, Winfield, Little Falls, Schuyler, Manheim, Fairfield) and the others do not.
7. By far, the majority of participants felt that there is a great deal of interest among town residents in supporting farming: 21 (51% of participants) indicated they felt residents in their town are very interested (a ranking of 5). Six people felt their town residents are somewhat interested (ranking of 4), 10 felt their town residents are interested (ranking of 3), five felt their town residents are a little interested (ranking of 2), and three people felt their town residents are not interested (ranking of 1 – Norway, and an unidentified town).
8. Most of the participants were not aware of conflicts between farmers and non-farmers in their town (25 people or 61%; 10 towns). Five people representing three towns didn't know, and nine people representing 3 towns were aware of conflicts. Towns where there are known conflicts were German Flatts (odors from farms), and Manheim and Newport (both identifying issues with manure on roads). One person identified large solar farms as a conflict.

⁶ Towns indicating that they have right to farm laws included Frankfort, Columbia, Little Falls, Schuyler, Manheim, Fairfield, Newport, Norway, Salisbury, Warren.

9. The survey explored potential strategies that can improve farming in the County. These strategies, in order are⁷:
- Increase the general public's awareness of local agriculture (24 people/59%)
 - Enhance marketing and promotion of local agricultural products (24 people/59%)
 - Attract new farmers and agri-businesses to the County (20 people/49%)
 - Promote agriculture-friendly zoning and local land use laws (19 people/46%)
 - Promote use of renewable resources on farms (biodiesel, solar, wind) (19 people/46%)
 - Help farmers diversify their operations (19 people/46%)
 - Develop more programs to support small, niche and specialty-crop farms (16 people/39%)
 - Enhance agricultural economic development Programs in the County (14 people/34%)
 - Improve availability of cellular service and broadband (14/34%)
 - Pass Right to Farm Laws (12/29%)
 - Provide more education for farmers (11/27%)
 - Increase technical support to farmers such as farm-business planning, farm transfer and succession programs (11/27%)
 - Promote and support agri-tourism operations (10/24%)
 - Establish a meat processing facility (7/17%)
 - Create a transportation and distribution program for local products (like a food hub) (7/17%)
 - Establish food preparation facilities (i.e., community kitchens) (4/10%)

⁷ When farmers and farmland owners were asked what strategies were important, the top three were promote agriculture-friendly zoning land use laws, pass right to farm laws, and enhance marketing and promotion about farms and farm products with farmers and the general public.

Detailed SWOT from All Public Input

Strengths

- Environmental Resources
 - Abundant, clean water available for agriculture.
 - Climate is good for agriculture and especially for forage-based agriculture.
 - County has beautiful landscapes.
 - Good soils in County for farming.
 - Wildlife habitats are associated with farmland.
- Agriculture and Farm-Related Activities
 - Farm Progress Show is a grassroots effort to promote ag.
 - Garlic Festival.
 - County has a local food map used for farm and ag-product marketing.
 - Farming the Future BOCES program.
 - Successful agritourism events, including the Little Falls Garlic Festival (18 years) and Cheese Festival (5 years)
 - 4-county Cheese Trail being launched.
- Farm Infrastructure Capacity including Support Agencies/Organizations
 - Local roads program addresses safety and education related to slow moving vehicles including ag vehicles, as well as horse/buggy.
 - SWCD programs that benefit farmers.
 - Cheap farmland compared to other locations.
 - County has capability for a processing plant due to sewer plant capacity.
 - Farm infrastructure and agri-businesses are still available to support farms.
 - Close to NY and Boston urban markets.
 - Close to Thruway/transportation links.
 - Erie Canal historical role in agriculture (transported cheese to NYC).
- Trends
 - Agriculture is still #1 industry in Herkimer County: \$57.9 million in sales
 - The number of farms with sales ranging from \$10,000 to \$49,000 have increased, as has the number of farms with sales > \$500,000.
 - Amish and Mennonite farmers moving into the County.
 - Farms positively impact local economy, bring in more money in taxes than the municipalities give out in services and has large multiplier effect, especially for dairy.
 - Agricultural production support services, food manufacturing and farm product wholesaling brings 400 jobs with \$17 million in annual payroll.
 - Growth of niche/specialty farm operations.
 - There has been growth in the number of small farms (100 acres or less).
 - Increasing diversification of farms with less dairy but more crops and mixed livestock.

- There has been a substantial increase in the amount of maple syrup produced in the County and growth in the sales of grain, soybean, hay, and sheep and goats and their products.
- Potential for non-traditional crop production, such as hops and industrial hemp.
- There are more farmers growing local produce (example of Amish growers).
- The value of agricultural products sold directly to consumers have increased.
- There are more organic farms and sales of organic products.
- There are new, young families looking for local foods which could positively influence the market.
- Greater interest in Ag education in County school districts. There is more recognition now of the value in ag education.

Weaknesses

- **Negative Attitudes and Perceptions About Agriculture**
 - Adults need an open mind about agriculture and agricultural education. BOCES and other educational programs labeled 'Ag Program' can foster bad attitudes that 'people don't want to be in production agriculture'. It should be labeled 'food production' to be more attractive to students and families. This stems from agricultural education that has been used in the past as 'dumping ground' to get kids graduated and contributes to stigma about agricultural careers.
 - Agriculture has no voice with supervisors, legislators, general public. Need education of these individuals as the first order.
 - CCE is perceived as focusing on the dairy industry and not supportive of diversification.
 - General population doesn't understand, is not aware of or supportive of local agriculture.
 - Perception or reality that young people don't want to work hard anymore.
 - Resistance to having food processing facilities in local communities is a problem.
 - School guidance departments track students away from ag-related careers. There is a lack of understanding about ag careers.
 - Lack of support for agriculture and farming in the community.
- **Lack of Agricultural Education – both for Youth and Adults, General Population and Farmers**
 - Barriers to involve young people in FFA exist because they need to be enrolled in an ag class.
 - Farmers are not always aware of ag programs that are available.
 - Farmers aren't necessarily skilled in marketing and distributing the product they grow.
 - Lack of knowledge among the general public about available local agricultural products.
 - Middle school students who have participated in ag education often can't continue into high school due to lack of time in school schedules.
 - Many farmers on the local food map are not ready to receive visitors. There is need for training on how to "present" their farm to the public and deal with customers.
 - Need to better educate the public about the importance of agriculture and encourage residents to "buy local".
 - School administrators don't understand ag and food systems which makes it harder to implement agricultural education.

- Need to promote more education so that proper land assessments are done.
- Costs of Farming
 - Cost of health insurance.
 - Cost of labor and cost of operational expenses.
 - Cost to put produce in storage is a moderate to fairly moderate problem.
 - Costs for transportation of product to markets.
 - Workers compensation costs in NY are high.
 - Property taxes are high.
 - DFA/Agri-Mark dominate the dairy industry, are a monopoly, and promote cheap food policies which hurts farmers. Milk prices are controlled and monopolized by large corporations.
- Economic Factors
 - Low prices for products.
 - Many farms in the County have agricultural sales of less than \$10,000.
 - Saturation of milk market and resulting low dairy prices. There has been a significant loss of dairy farms and dairy sales.
 - Inability to compete with prices at large retailers like Wal-Mart.
 - Challenges getting local ag products into grocery chains.
 - Fewer people drink milk and there is more competition now with alternative beverages such as soy or almond 'milk'.
 - Limited inclusion of agriculture as part of other economic development programs.
 - Most economic development funds are for hard assets and job creation rather than working capital and often not suited to agriculture.
- Farmer/Non-Farmer Conflicts
 - Animal rights activist groups.
 - Conflicts with non-farmers over manure spreading/smells/management.
 - Difficulty of large farm equipment traveling on roads.
- Regulatory Challenges
 - Compliance with CAFO rules is difficult and likely to affect more farms in the future.
 - Federal and state regulations are hard to navigate.
 - Lack of understanding of both the Ag District Law and local zoning and codes enforcement. Local municipalities need to be more ag-friendly in their codes. Local regulations and building codes make it hard to have multiple businesses on farm and diversify.
 - Insurance and liability concerns affects farms' ability to pursue agri-tourism on the farm.
 - Labor difficulties – new farm worker labor law is unfair and will hurt farmers.
- Diminished Farm Support Programs and Agencies
 - FSA is being cut.
 - Lack of coordinating agency to implement programs.
 - Lack of funding for farm support agencies.
 - Lack of local engineering to help manage manure/nutrient management. No nutrient manager for Herkimer County.

- Lack of support for helping dairy farmers transition to other farming operations.
- Some agricultural support services and businesses require farmers to travel outside the County.
- Lack of Communication and Collaboration
 - Lack of advocacy and a voice for farmers locally and at national level.
 - Lack of collaboration. Too many groups working in isolation from other groups and not working or coordinating together. There is a lack of communication and networking among farmers.
 - Local food map is not interactive digitally.
- Farm Infrastructure Issues
 - Distribution of local products is difficult.
 - Lack of a food hub.
 - Lack of broadband/cell services.
 - No infrastructure for beef and beef processing.
 - No nearby large animal veterinarians.
 - Road maintenance has not kept up with bigger equipment farmers use. Hard to bring equipment on roads; people driving today makes traveling with farm equipment unsafe.
 - There has been a loss in the number of mid-sized and large farms in the County.
- Loss of Farmland
 - Loss of farmland to non-farm uses.
 - Soil erosion and soil health a concern.
 - Solar facilities are taking good farmland.
 - There is some development pressure to convert farmland to non-farm uses.
 - Some feel that there will be no farms left in 10 years.
- Diversification, Long-Term Planning
 - Few farms using nontraditional methods to sell their products (such as direct sales, CFA's, online).
 - Hard to access markets.
 - Lack of diversification on many farms. Many farms have not diversified yet.
 - Lack of marketing and promotion. This includes lack of marketing skills by farmers, lack of marketing ag products, and lack of marketing the County to new farmers.
 - Lack of new generation of farmers and lack of young people interested in agricultural careers or businesses. Farm population is aging.
 - Lack of value-added farming.
 - Limited agri-tourism opportunities.
 - Many farms lack a transition plan.
 - Multiple farmers markets exist which may result in farmers being spread too thin.
 - Relatively few farms offering on-farm agri-tourism activities.

Opportunities

- A. Enhance Promotion and Marketing
 - 1. Advertise and market local foods more.

2. Develop a Mohawk Valley brand for local food products, including locally branded milk. Find an image that people can relate to. This will be most successful as a multi-county effort.
 3. Develop incentives for attracting new, starting farmers. For example, have a pilot program that offers tax incentives for new farmers.
 4. Develop marketing and promotion programs – for farmers to sell their products, and for attracting new farmers to the area.
 5. Do more public events that are related to agriculture.
 6. Promote and help people understand the NE is the place for milk production, not the Western US.
 7. Promote Herkimer County as having food ‘right in our backyard’ – the dollars will stay here and with little extra cost involved for the farmer.
 8. Promote one person at each school to be an ag champion to foster an understanding about agriculture with teachers, administrators, students and parents.
- B. Expand Regional Programming
1. Be more regional in approach and share services and programs.
 2. Cooperate with other counties to share personnel to implement needed ag-related programs.
 3. Partner with Oneida County more.
 4. Create a mechanism for more sharing and collaboration among farmers, such as forums supported by the County.
- C. Enhance Agricultural Education
1. Bring students to the Herkimer County Fair’s FFA booth to talk to the public about agriculture.
 2. Build partnerships to get state grants to promote ag education.
 3. Change attitudes about the role of agriculture in the County to embrace aggressive support of farms from an economic perspective.
 4. Connect urban kids to Market NY.
 5. Convey the positive role farming has on the local economy.
- D. Develop New Food Processing
1. Develop a food hub or co-op to aggregate, package and distribute local products.
 2. Develop a slaughterhouse for locally produced beef.
 3. Develop a test creamery.
 4. Establish a local foods incubator and commercial kitchen in Little Falls.
 5. Establish local dairy processing. Emulate the Ronnybrook Dairy model. This might be more successful to be a regional dairy processing facility. Although some felt this was not realistic and that there were not likely investors to make this happen.
 6. People are looking for convenience in food choices. There is opportunity for small scale processing oriented to creating convenience foods for direct sales (e.g., precut vegetables).
 7. Have a small clean vegetable/process vegetable/dairy processing facility.

- E. Expand Farm Support Agencies and Organizations
 - 1. Expand CCE to be an institution that can help farmers diversify and support those activities.
 - 2. Expand SWCD to be able to provide new expertise and nutrient management in County. Seek County funding for a Certified Nutrient Management Planner.
 - 3. Fund the Dairy Transition Program.
- F. Implement This Plan
 - 1. Implement agriculture-friendly zoning and local regulations.
 - 2. Implement this plan successfully by having an ag implementation specialist (part time or full time) and an organizing committee. County should commit to hiring someone to do this, housed in CCE, IDA or SWCD. This was discussed as a critical step. There is need for a point person to take charge and provide expertise and ‘boots on the ground’ to realize program ideas. Consider participating with Otsego County as they have a half-time person that may be able to be shared to also support Herkimer County.
 - 3. Include in the Plan a strategy to have a more active AFPB that should revisit goals, vision and provide support for implementing the strategies.
 - 4. This plan will need a website to make it publicly accessible and relevant over time so people can see it, refer to it, and use it.
- G. Programs to Retain and Expand Agriculture
 - 1. Initiate a program like Oneida County (Dairy Sustainability Plan).
 - 2. Emulate some of the dairy initiatives seen in Central NY.
 - 3. Encourage more opportunities to expand agricultural activities through offering services, education, funding, and support.
 - 4. Enhance use of non-traditional sales methods such as direct sales, online sales.
 - 5. Establish a Farm to Institution program that gets more local farm products used in institutions.
 - 6. Fully develop the Cheese Trail (working on this).
 - 7. Get involved with SUNY Cobleskill artisan dairy processing.
 - 8. Have a committee to communicate and network with schools and make local connections. Promote dialogue among all groups.
 - 9. Have youth programs to promote agricultural careers including a mentoring program (see Q 21 on survey).
 - 10. IDA to expand their involvement in setting up connections.
 - 11. Invite educators to the Farm Progress Show – someone from each Board of Education needs to be there to see and learn.
 - 12. Involve FFA Alumni in these programs.
 - 13. Legislators should speak to ag processors. Law makers at all levels need to change the ‘cheap food policy’, and also revise the milk price formula.
 - 14. Link younger and older farming generations to help new people get into farming.
 - 15. Make the local food map interactive through a website and app for phones.
 - 16. Offer business planning for farm diversification. Offer educational, technical and business training to help farmers diversify and add value-added operations. Help dairy farmers

- diversify – cheese and dairy alternatives (soy, for example). Explore more non-animal-based agriculture (plant forward foods).
17. Offer climate change programming to help farmers learn what is needed to adapt to changing weather conditions. Part 2, Appendix F offers details on agricultural resiliency options to address climate change.
 18. Offer education and tools to help farmers plan for their farm transfer.
 19. Offer help to farmers so they can successfully navigate local, state or federal rules.
 20. Promote dairy beef and other meat products as they are year-round product. A meat processing plant is very important to accomplish this.
 21. Promote industrial hemp.
 22. Promote innovative High School programs that promote agriculture such as that in Hamilton (Thank a Farmer Gift Boxes).
 23. Promote microbreweries.
 24. Promote pasture dairy operations - Pastured cows make better cheese too – need to take more advantage of the grass and grazing opportunities in the Count. Pasture more cows and sell this as the image of Herkimer County.
 25. Promote small, niche farming. Small niche farms can over time grow to become bigger farms. There needs to be more support/education to diversify or start new niche farms. These won't be dairy but could be small cheese makers supported by the remaining dairy farms.
 26. Promote use of wind and solar on farms for farm use. Provide model local laws for solar. Ensure they include an exit plan/decommissioning plan.
 27. Provide for grant writing services so that SWCD, CCE and others can take advantage of the grants that are out there. Currently there is no capacity to write grants.
 28. Provide model local laws that are agriculture-friendly to local municipalities to use.
 29. Recognize that developing ag tourism is a primary goal and identify ways we can help entrepreneurs build their businesses. It is an economic development program and needs to be a priority in the County.
 30. Reduce the number of cows – move towards dairy beef and have a program to market cull cows collectively. See Slate Foods – good quality cull cows.
 31. Sell more ag education by promoting that ag education fills the technology curriculum needs.
 32. Sponsor students to attend the NYS FFA Convention. State FFA Alumni can sponsor scholarships.
 33. Start a Herkimer County farm visitation day (like Madison County). Might be a way to make the local food map more effective.
 34. Start regional incentives for Farm to School improvements/enhancements.
 35. The general public is interested in local food. Take advantage of this.
 36. There needs to be rules of engagement between farmer and processor. Currently there are none and terms of contracts often do not benefit the farmers.
 37. Use local food to revitalize communities. Look at Hartwick and promote how food can change your community.

38. Vacant lands can be used to support urban agriculture – promote urban agriculture more.
(See Vacant Land Map.)
 39. Work to get whole milk in area schools.
 40. Work with farmers that are on the local food map prepare for direct sales or visitors to their farm.
 41. Work with Hannaford, Price Chopper and other similar stores to market NYS ag products with better signage promoting local foods.
- H. Protect Farmland
1. Preserve good farmland for agriculture when solar facilities are proposed. Small solar projects are OK, but they shouldn't take up prime lands. They may be helpful for cash flow on a farm. However, not all participants felt solar facilities will benefit the landscape.
 2. Establish farmland preservation programs and expanded use of conservation easements.

Threats (External factors that can have a negative impact on Herkimer County Agriculture)

- Climate change.
- Continued low milk prices and prices for other commodities. Ongoing loss of dairy farms.
- Price competition with large retailers
- Operations costs that are out of the control of farmers
- National agricultural policies oriented toward production of 'cheap' food
- Lack of funding for farm support agencies
- Aging farmer population

Appendix D: Agriculture-friendly Audit

An audit of several town-level comprehensive plans and zoning laws was done as part of this Herkimer County Agricultural and Farmland Protection Plan. This audit was designed to help gauge the ‘farm-friendliness’ of local land use programs and to offer helpful suggestions for improvement. These audits were done in recognition that a comprehensive plan and related land use regulations can affect agricultural operations in both positive and negative ways.

A comprehensive plan is an important community document because it is the foundation for local land use regulations. The plan establishes the vision a community has for itself, which is then translated into land use regulations, such as zoning and subdivision. Land use regulations should be designed to meet community needs and objectives – which are usually outlined in a comprehensive plan.

Zoning can both create opportunities for agriculture and place barriers to farming or certain farming practices. For example, land use regulations can explicitly prohibit certain farm activities, allow for others, or even introduce confusion when certain activities are not adequately defined or addressed. Zoning language often can be vague which can lead to unnecessary or lengthy permit reviews or variance requests. Zoning laws sometimes regulate where and how farms can operate, and what review processes a farmer may be required to undertake.

Zoning also identifies whether a farm use is permitted as of right (with no further planning board review), or if a more involved review process such as a site plan or special use permit approval is required. Some zoning laws also regulate setbacks, height, the minimum number of acres required to be considered a farm or regulate the number of animals a farmer may have – all of which may pose barriers to agriculture.

Choices made by local communities in their zoning can affect land values; make farm expansion or start-ups difficult; contribute to land use conflicts; and even hasten conversion of farmland to other uses. When local laws restrict agricultural uses, a sense of impermanence for farming can develop. That feeling of impermanence can in turn, foster disinvestment in farm operations and ultimately lead to sale of the land for non-farm development. This effect, coupled with non-farm growth pressures such as residential and commercial development, can make selling land for non-farm development appealing – especially in the stressed agricultural economy of late.

Understanding the local regulatory climate is the first step towards improving an area’s farm-friendliness. This is also an important aspect considering New York State Agriculture and Markets Law 25-aa. That state law establishes agricultural districts where farmers receive protection against local laws that unreasonably restrict farm operations. It also offers right-to-farm protection from private nuisance claims. New York State Agricultural Districts are designed to support a favorable operating environment for farms. One of the goals of this County Agricultural and Farmland Protection Plan is to identify and enhance agricultural operations and related businesses. Understanding what barriers to agricultural viability exist

is a first step to improve conditions. This audit is designed to identify areas where improvements can be made in the future. The audit was completed to understand the local land use regulatory environment, how local governments approach farming in Herkimer County, and where there are weaknesses that could be addressed.

The Audit

To accomplish these tasks, comprehensive plans and zoning regulations were evaluated in four towns (Columbia, Manheim, Newport, and Schuylar). These towns were chosen and evaluated in detail as representative of different locations and conditions in the County. The Herkimer County Agricultural and Farmland Protection Plan Advisory Committee selected these communities for this audit and the planning consultant for the project conducted the audits. Comprehensive plans and zoning laws for each town were evaluated against a series of questions that explore the level of farm-friendliness. These questions are based on similar agriculture-friendly audits done throughout the State.

The results for each community are offered below. 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 to agriculture. General observations related to the state of farm-friendliness in Herkimer County and recommendations to improve conditions for farming are also offered below.

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” at <https://agriculture.ny.gov/land-and-water/section-305-review-restrictive-laws>.

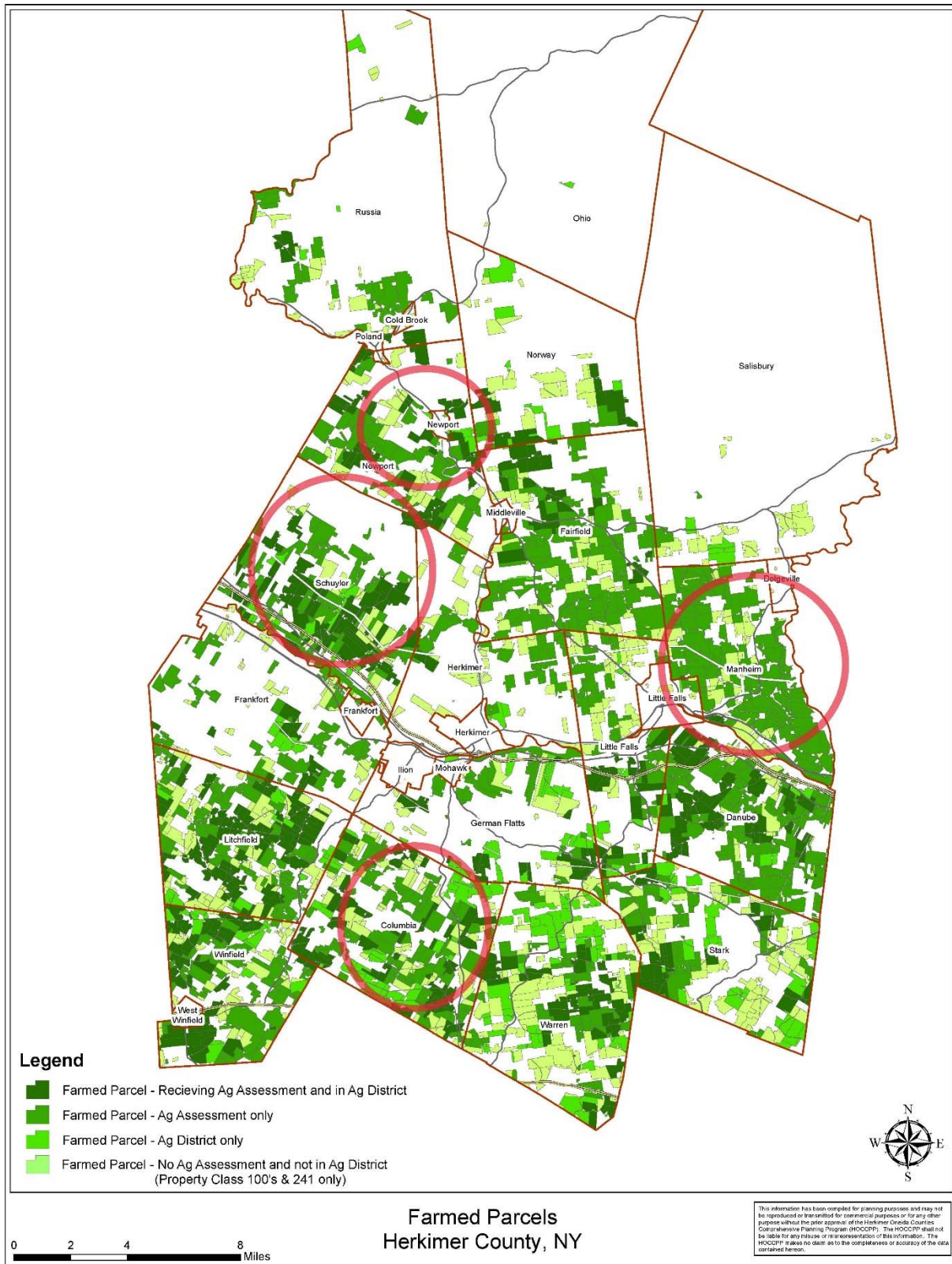


Figure 11: Location of the Four Towns Included in Audit.

Agriculture-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 agriculture-friendly plan or land use regulation would positively address most of these criteria.

Comprehensive Plans

- Does the plan have a section on agriculture?
- Does the plan include maps of agricultural lands, important farmland soils, agricultural districts, etc.?
- Was there public input that explored the role of agriculture in the community? E.g., did a survey include questions about agriculture? Was there anything in workshops about it?
- Do the vision statement or goals of the plan address agriculture in any way? Is there any visible demonstration of the value of agriculture to the community in the plan?
- Does the plan consider agriculture as an important resource in Town?
- Does the plan recognize or reference a local or County agriculture and farmland protection plan?
- Does the plan include any data on farms and farmland? Acreage? Income or occupations from farming or other demographic data?
- Does the plan establish policies towards farmland and farming?
- Does it identify the value of farmland and farms to the community?
- Does it offer any recommended actions related to farming or farmland or ways to preserve or enhance farming?
- Does the plan establish a policy and/or future actions for the agricultural use of open space that may be created in a conservation subdivision or clustering?
- Does the plan discuss New York State's agricultural district program and how the town can be supportive of that program?
- Does it consider farmland a natural resource and encourage easements or other protections of that land? Is there a policy discussed for Purchase of Development Rights (PDR), (Leasing of Development Rights (LDR) or Transfer of Development Rights (TDR)?
- Is agriculture a consideration of where growth does or does not take place?

Regulations (Zoning)

- Does the regulation's purpose statement include a discussion of agriculture, or the promotion or preservation of agriculture specifically?
- Does zoning allow agriculture as a permitted use by right in any district?
- Does zoning not prohibit agriculture in any district other than hamlet centers or commercial areas?
- Are no special use permits for agriculture or ag-related uses in any district?
- Are no higher density or commercial growth activities encouraged in core farm areas or where a NYS Agricultural District exists?
- Does the zoning establish a local agricultural zoning district, 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 construction or subdivision?
- Are innovative development patterns that preserve farmland encouraged, allowed, or mandated (conservation subdivision, clustering, TDR)?

- Are off-site or on-site signs allowed to attract and direct people to farm stands?
- Are farm stands, farm retail markets, agri-tourist businesses, breweries, etc. allowed?
- Are farm processing facilities such as community kitchens, slaughterhouses, etc. allowed?
- Are farm stands not limited to selling just products from that one farm?
- Do farm stands not need a site plan review or special use permit?
- Does zoning allow for accessory uses such as greenhouses, barns, garages, equipment storage etc. permitted as of right?
- Do application requirements include asking for submittal of information or maps about farming that might be taking place on or near the project parcel? Whether it is in an ag district? What farming activities take place on or near the site? Whether prime farmland soils are present?
- Do standards exist that require the Planning Board or Zoning Board of Appeals to evaluate impacts of a project on agriculture?
- Do any design standards exist to direct building envelopes to areas on a parcel that would still allow farming to occur on remaining open spaces?
- Does the regulation define agriculture, agricultural structure, farm worker housing, agri-tourism, agri-business?
- Are farm-related definitions broad and flexible and not confined to a certain number of acres or income earned?
- Are non-traditional or retail-based farm businesses allowed ? For example, can a farmer set up a brewery on site and sell products onsite?
- Is an agricultural data statement as required per AML 25-aa an expected part of an application for site plan, subdivision, special use or other zoning? (An agricultural data statement is required as per New York State Agriculture and Markets Law 25-aa, Section 305-b to identify farm operations within an agricultural district or located within five hundred feet of the boundary of property where a project is proposed needing municipal review and approval by the planning board, zoning board of appeals, town board, or village board of trustees pursuant to article sixteen of the town law. "The planning board, zoning board of appeals, town board, or village board of trustees shall evaluate and consider the agricultural data statement in its review of the possible impacts of the proposed project upon the functioning of farm operations within such agricultural district.")
- Does the community require placement of an ag disclosure statement on plans or plats when development takes place in a NY certified ag district? (25-aa also requires a 'disclosure notice' to be prepared when any purchase and sale contract is presented for the sale, purchase, or exchange of real property located partially or wholly within a NYS agricultural district. Prospective grantors of land shall present to the prospective grantee a disclosure notice which states the following as per 25-aa: "It is the policy of this state and this community to conserve, protect and encourage the development and improvement of agricultural land for the production of food, and other products, and also for its natural and ecological value. This disclosure notice is to inform prospective residents that the property they are about to acquire lies partially or wholly within an agricultural district and that farming activities occur within the district. Such farming activities may include, but not be limited to, activities that cause noise, dust and odors. Prospective residents are also informed that the location of property within an agricultural district may impact the ability to access water and/or sewer services for such property under certain circumstances." 25-aa requires that a receipt of such disclosure notice be recorded on a property transfer report form. Usually real estate agents take care of this, but to promote the importance an agricultural district holds in a municipality, many communities also require the disclosure statement to be included on all site plan and subdivision plans to inform current and future owners.)
- No ag-related uses required to get a special use permit or go through site plan review?

- Does the regulation define and allow for farm worker housing? Are mobile homes allowed as farm worker housing?
- Are silos and other farm structures exempt from height requirements?
- Are personal wind mills and solar panels allowed for farms? With permits or permitted as of right?

Table 4. Agricultural characteristics of the four towns included in agriculture-friendly audit

Town	Columbia	Manheim	Newport	Schuyler
Acres of Prime Soils	10,007ac	4,832ac	3,010ac	5,064ac
Percent of Total Land Base in Prime Soils	38%	27%	15%	20%
Acres of Statewide Significant Soils	5,052ac	3,629ac	3,544ac	4,533ac
Percent of Total Land Base in Statewide Significant Soils	19%	21%	18%	18%
Percent of Town in with Prime or Statewide Significant Soils	57%	48%	33%	38%
# of structures built 2010-1015	42	20	39	60
# farmed parcels in ag district	98	5	38	64
Acreage classified as farm parcels	15,458ac	12,950ac	9,836ac	11,364ac
Percent of Total Land Base in Town Classified as Farm Parcels	58%	73%	50%	45%
Acreage receiving Ag Value Assessment	9510ac	10864ac	7308ac	8715ac
Percent of farmed land base Receiving Ag Value of Assessment	62%	84%	74%	77%
Acres of land in Ag District	6553ac	52ac	3386ac	5187ac
Percent of farmed land base in Ag District	25%	0%	17%	20%

Four-Town Zoning and Land Use Law Audit Results

Agriculture-friendly Criteria	Columbia	
	Status	Notes
Comprehensive Plan (2018 Updated from a 2007 Version)		
Does the plan have a section on agriculture?	YES	Has two sections that offer information on current status of agriculture in Town with descriptions of Ag Districts.
Does the plan include maps of agricultural lands, important farmland soils, agricultural districts, etc.?	YES	Ag District parcels and boundaries only
Does Plan explore role of agriculture in the community? Was a survey done and included questions about agriculture?	YES	Public Survey conducted in 2016
Does the vision statement or goals address agriculture in any way? Is there any visible demonstration of the value of agriculture to the community in the plan?	YES	New Plan adds community goal specifically to protect and encourage agriculture 'as it is central to the Town's character.' Value of ag lands to wildlife discussed. Ag section discusses important role of ag in Town. Establishes 3 goals related to Ag that set general policy to discourage land uses that interfere with ag activities, provide for growth in ways that do not negatively impact ag and rural character, to not constrain farmers from improving or expanding their farms, to review ag tourism uses as commercial enterprises, and to consider large scale solar and wind as industrial or business development.
Does the plan consider agriculture as an important resource in Town?	YES	This is highlighted in several places in the Plan.
Does the plan recognize or reference a local or County agriculture and farmland protection plan?	NO	No reference or discussion of 2002 County-wide Agricultural and Farmland Protection Plan
Does the plan include any data on farms and farmland? Acreage? Income or occupations from farming or other demographic data?	YES	Included
Does the plan establish policies towards farmland and farming?	YES	Goals and three broad policies established specifically related to agriculture

Agriculture-friendly Criteria	Columbia	
	Status	Notes
Does it identify the value of farmland and farms to the community?	YES	Via general discussion. No economic figures offered.
Does it offer any recommended actions related to farming or farmland or ways to preserve or enhance farming?	MINIMALLY	Broad policies are stated related to ensuring land uses do not interfere with ag operations and use of solar farms.
Does the plan establish a policy and/or future actions for the agricultural use of open space that may be created in a conservation subdivision or clustering?	NO	Not discussed
Does the plan discuss NYS agricultural districts and how the town can be supportive of that?	Yes	The ag districts are discussed and mapped. However, they are not connected to land use goals.
Does it consider farmland a natural resource and encourage easements or other protections of that land? Is there a policy discussed for PDR, LDR or TDR?	PARTIALLY	No discussion or policy for use of easements is offered. The Plan does establish the importance of farms and farmlands, but no specific tools are offered related to encourage use of easements.
Is agriculture a consideration of where growth does or does not take place?	NO	The Plan is not specific to this level. There is an Ag zoning district established in zoning, but most of town is RA (Residential/Ag) that does not distinguish growth areas to protect agriculture.
Zoning (2015)		
Does the regulation's purpose statement include a discussion of agriculture, or promoting or preserving agriculture specifically?	YES Very Good	Includes purpose to encourage wise use and sound management of the town's natural resources and agricultural areas in order to preserve the integrity, stability and beauty of the community and value of land.' Section 103 makes a specific statement that ag and farming are important, and the zoning law serves to protect and encourage ag viability.
Does zoning allow agriculture as a permitted use by right in any district?	YES	RA: Ag, farms, hobby farms and commercial gardening allowed as a permitted use in RA, allows farm labor dwelling, farm stand as permitted accessory use AC: commercial greenhouse is permitted along with same use rules for RA district.

Agriculture-friendly Criteria	Columbia	
	Status	Notes
		Note its Appendix A which outlines uses is somewhat different than the Use section in the main part of zoning. For example, farm stand is not included in the table, but is included in the description of Section 304. This conflict could be a challenge. Makes a distinction between commercial agriculture and farm and hobby farm by definition but all are permitted uses in both zoning districts. And for example, farm worker housing listed as an allowed use in Section 304 but not included in the Use Table of Appendix A
Does zoning prohibit agriculture in any district other than hamlet centers or commercial areas?	NO	
Are special use permits for agriculture or ag-related uses are required in one or more districts?	YES, FOR SOME USES	SUP required for commercial greenhouse as per Section 304 and 305, but is not included at all in Appendix A. May be some confusion between commercial gardening and commercial greenhouse.
Is residential, higher density or commercial growth allowed in core farm areas or where a NYS Ag District exists so that conflicts may arise?	YES	The majority of Town is in RA district which allows a variety of residential, public and commercial uses in agricultural areas. Figure 2 shows many new homes built in and around agricultural parcels.
Does the zoning establish a local agricultural zoning district, ag overlay district, or special use district for agriculture?	NO	
Does the zoning allow farms to have more than one business or offer flexibility to accommodate the needs of agricultural businesses?	NO	Not specifically. This topic is not addressed. This vagueness may make it difficult for farmers to know.
Are buffer zones between farmland and residential uses required for new construction or subdivision?	NO	
Are innovative development patterns that preserve farmland encouraged, allowed, or mandated (conservation subdivision, clustering, TDR)?	NO	But the law defines clustering, but gives no detail, procedures, standards or other information about it. Their subdivision has no mention of it either.

Agriculture-friendly Criteria	Columbia	
	Status	Notes
Are off-site or on-site signs allowed to attract and direct people to farm stands?	YES	
Are farm stands, farm retail markets, agri-tourist businesses, breweries, etc. allowed?	FARM STANDS ONLY	No mention of other types of farm activities such as these. It is unclear whether they would be allowed or not.
Are farm processing facilities such as community kitchens, slaughterhouse, etc. allowed?	NO	No mention of these. It is unclear whether they would be allowed or not.
Farm stands are not limited to selling just products from that one farm?	NO MENTION	Not addressed
Do farm stands need a site plan review or special use permit?	NO	They are allowed as a permitted accessory use in both districts. Limited to < 150 square feet
Does zoning allow for accessory uses such as greenhouses, barns, garages, equipment storage etc. permitted as of right?	YES	Not greenhouses – which if commercial, need a special use permit. Other uses not addressed.
Do application requirements include asking for submittal of information or maps about farming that might be taking place on or near the project parcel? Whether it is in an ag district? What farming activities take place on or near the site? Whether prime farmland soils are present?	NO	None of the procedures ask for any of this information.
Do standards exist that require the PB or ZBA to evaluate impacts of a project on agriculture?	NO	None of the review criteria specifically ask Planning Board or ZBA to evaluate this. However, this would be a question asked via a SEQR analysis.
Do any design standards exist to direct building envelopes to areas on a parcel that would still allow farming to occur on remaining open spaces?	NO	

Agriculture-friendly Criteria	Columbia	
	Status	Notes
Does the regulation define agriculture, agricultural structure, farm worker housing, agri-tourism, agri-business?	VERY LIMITED	Defines agriculture, farm, hobby farm, commercial garden, forest management, wildlife management, farm stand
Are farm-related definitions broad and flexible and not confined to a certain number of acres or income earned?	REQUIRES > 10 ACRES	Farm definition is problematic in that it requires at least 10 acres of land and >\$10,000 gross income to be a farm. Agriculture definition does not mention these restrictions. A hobby farm can't be more than ½ of a household's total income. As per Section 304, all uses must have a 2-acre minimum lot size and there does not seem to be an exclusion for ag uses.
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 onsite?	NO MENTION	
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?	NO	
Does the community require placement of an ag disclosure statement on plans or plats when development takes place in a NY certified ag district?	NO	
Does the regulation define and allow for farm worker housing? Are mobile homes allowed as farm worker housing?	YES	Farm labor housing listed in Section 304 as a permitted accessory use and permitted on a farm. One-family manufactured homes allowed as a permitted use. No mention of it in relation to farm labor use.
Are silos and other farm structures exempt from height requirements?	YES	
Are personal windmills and solar panels allowed for farms? With permits or permitted as of right?	NO MENTION	

Agriculture-friendly Criteria	Columbia	
	Status	Notes
Other relevant items		Section 603 (Site Plan Review) exempts ag related buildings from site plan review. No zoning permit is required for any farm building or use but encourages farm owners to abide with the spirit of the law in design, siting, and use. Unclear whether various lot dimensions and setbacks are required for ag uses.

Agriculture-friendly Criteria	Manheim	
	Status	Notes
Comprehensive Plan		
Does the plan have a section on agriculture?	NO PLAN	
Does the plan include maps of agricultural lands, important farmland soils, agricultural districts, etc.?	NO PLAN	
Does Plan explore role of agriculture in the community? Was a survey done and included questions about agriculture?	NO PLAN	
Does the vision statement or goals address agriculture in any way? Is there any visible demonstration of the value of agriculture to the community in the plan?	NO PLAN	
Does the plan consider agriculture as an important resource in Town?	NO PLAN	
Does the plan recognize or reference a local or County agriculture and farmland protection plan?	NO PLAN	

Agriculture-friendly Criteria	Manheim	
	Status	Notes
Does the plan include any data on farms and farmland? Acreage? Income or occupations from farming or other demographic data?	NO PLAN	
Does the plan establish policies towards farmland and farming?	NO PLAN	
Does it identify the value of farmland and farms to the community?	NO PLAN	
Does it offer any recommended actions related to farming or farmland or ways to preserve or enhance farming?	NO PLAN	
Does the plan establish a policy and/or future actions for the agricultural use of open space that may be created in a conservation subdivision or clustering?	NO PLAN	
Does the plan discuss NYS agricultural districts and how the town can be supportive of that?	NO PLAN	
Does it consider farmland a natural resource and encourage easements or other protections of that land? Is there a policy discussed for PDR, LDR or TDR?	NO PLAN	
Is agriculture a consideration of where growth does or does not take place?	NO PLAN	
Zoning (1996)		
Does the regulation's purpose statement include a discussion of agriculture, or promoting or preserving agriculture specifically?	NO	No mention of agriculture in purpose statement.
Does zoning allow agriculture as a permitted use by right in any district?	YES	Yes, and defines agriculture as needing 1 ½ acres; allows for sale of ag products raised on property. Other ag-related uses allowed with special use permit.

Agriculture-friendly Criteria	Manheim	
	Status	Notes
Does zoning prohibit agriculture in any district other than hamlet centers or commercial areas?	No	Only not allowed in Commercial and Industrial districts
Are special use permits for agriculture or ag-related uses are required in one or more districts?	YES, FOR SOME USES	Riding stables, animal hospital/vet, ag machinery repair/sales, sawmill are ag-related uses that require special use permit. Agriculture is permitted though. One conflict may be that the definition of agriculture includes riding and boarding stables, but later the document also says that riding stables need a special use permit.
Is residential, higher density or commercial growth allowed in core farm areas or where a NYS Ag District exists so that conflicts may arise?	YES	Ag uses and residential uses both allowed together. No special area designated for ag uses. Lot size set at 3 acres or 1 ½ acres.
Does the zoning establish a local agricultural zoning district, ag overlay district, or special use district for agriculture?	NO	
Does the zoning allow farms to have more than one business or offer flexibility to accommodate the needs of agricultural businesses?	NO	Not mentioned
Are buffer zones between farmland and residential uses required for new construction or subdivision?	POSSIBLY	520 (2) says that any permitted non-residential land use that abuts any land use in a residential district must have a 15' landscaped buffer. Unclear if this is applied to farm uses. And if yes, unclear if this is the responsibility of the farm or non-farm use to provide for.
Are innovative development patterns that preserve farmland encouraged, allowed, or mandated (conservation subdivision, clustering, TDR)?	NOT MENTIONED	
Are off-site or on-site signs allowed to attract and direct people to farm stands?	YES	
Are farm stands, farm retail markets, agri-tourist businesses, breweries, etc. allowed?	FARM STANDS ONLY	Farm stands are included, but no mention of other kinds of on-farm businesses such as these.

Agriculture-friendly Criteria	Manheim	
	Status	Notes
Are farm processing facilities such as community kitchens, slaughterhouse, etc. allowed?	MAYBE IN District	No food processing is mentioned at all, but it is possible that they would be allowed in the Industrial District. But no definitions or specific mention of them. Uses in that district, however, require 50-acre lot size. On-farm processing may also be allowed as part of agriculture, but it is neither defined nor discussed specifically.
Farm stands are not limited to selling just products from that one farm?	NO MENTION	
Do farm stands need a site plan review or special use permit?	NO	Permitted Use. It allows sale of products on farms.
Does zoning allow for accessory uses such as greenhouses, barns, garages, equipment storage etc. permitted as of right?	YES	Permits storage and accessory structures for agriculture.
Do application requirements include asking for submittal of information or maps about farming that might be taking place on or near the project parcel? Whether it is in an ag district? What farming activities take place on or near the site? Whether prime farmland soils are present?	NO	None of this information is required or asked for or evaluated.
Do standards exist that require the PB or ZBA to evaluate impacts of a project on agriculture?	NO	Not specifically mentioned to be evaluated.
Do any design standards exist to direct building envelopes to areas on a parcel that would still allow farming to occur on remaining open spaces?	NO	Section 502 lists performance standards – many of which appear to apply to agriculture. No language specifically exempts agriculture from these requirements.

Agriculture-friendly Criteria	Manheim	
	Status	Notes
Does the regulation define agriculture, agricultural structure, farm worker housing, agri-tourism, agri-business?	VERY LIMITED	Just Agriculture.
Are farm-related definitions broad and flexible and not confined to a certain number of acres or income earned?	PARTIALLY	Definition of agriculture is broad, but it also requires > 1.5 acres to be considered a farm.
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 onsite?	NO MENTION	
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?	NO	
Does the community require placement of an ag disclosure statement on plans or plats when development takes place in a NY certified ag district?	NO	
Are ag-related uses required to get a special use permit or go through site plan review?	PARTIALLY or UNCLEAR	Riding Stable requires a special use permit. Section 501 (Site Plan Review) does not exempt commercial agricultural structures from such review. While it is likely they interpret an ag building/structure/use to be part of agriculture and thus permitted, nothing specifically exempts such uses from site plan review. This could be clarified.
Does the regulation define and allow for farm worker housing? Are mobile homes allowed as farm worker housing?	NO	Not included.
Are silos and other farm structures exempt from height requirements?	YES	

Agriculture-friendly Criteria	Manheim	
	Status	Notes
Are personal windmills and solar panels allowed for farms? With permits or permitted as of right?	WINDMILLS REQUIRE PERMITS	Wind law specifically indicates that agriculture must comply with the wind turbine guidelines.

Agriculture-friendly Criteria	Newport	
	Status	Notes
Comprehensive Plan (2011)		
Does the plan have a section on agriculture?	NO	Ag districts are generally discussed. Does discuss soils suitable for ag uses. Other areas of discussion include agriculture in land use section.
Does the plan include maps of agricultural lands, important farmland soils, agricultural districts, etc.?	SOME	Ag Districts. Prime ag soils shown. References 2002 County Ag Plan.
Does Plan explore role of agriculture in the community? Was a survey done and included questions about agriculture?	YES	Yes - Did public input/survey and SWOT analysis that included agriculture.
Does the vision statement or goals address agriculture in any way? Is there any visible demonstration of the value of agriculture to the community in the plan?	YES	Has a goal to maintain economic viability of agriculture. Public clearly identified agriculture as important to their landscape and rural character.
Does the plan consider agriculture as an important resource in Town?	YES	
Does the plan recognize or reference a local or County agriculture and farmland protection plan?	YES	
Does the plan include any data on farms and farmland? Acreage? Income or occupations from farming or other demographic data?	PARTIALLY	Limited information is provided, but they reference the full County Agriculture and Farmland Protection Plan which does provide more information.

Agriculture-friendly Criteria	Newport	
	Status	Notes
Does the plan establish policies towards farmland and farming?	YES	Seeks to maintain economic viability of ag, to prevent conflicts between farmers and non-farmers
Does it identify the value of farmland and farms to the community?	YES	
Does it offer any recommended actions related to farming or farmland or ways to preserve or enhance farming?	YES	Ideas include open a farmer's market, more promotion of local produce, start a CSA and agri-tourism, zoning that will control development in scenic areas, and support County Plan. Also adopt a right to farm law, bring farmers and non-farmers together. But no specific land use tools identified.
Does the plan establish a policy and/or future actions for the agricultural use of open space that may be created in a conservation subdivision or clustering?	PARTIALLY	But not specifically. The need to protect open space and have zoning that controls development could be interpreted to include these.
Does the plan discuss NYS agricultural districts and how the town can be supportive of that?	PARTIALLY	Generally discussed.
Does it consider farmland a natural resource and encourage easements or other protections of that land? Is there a policy discussed for PDR, LDR or TDR?	NO	Not mentioned.
Is agriculture a consideration of where growth does or does not take place?	NO	Plan does not get into that kind of detail.
Zoning (2017)		
Does the regulation's purpose statement include a discussion of agriculture, or promoting or preserving agriculture specifically?	NO	Not Mentioned
Does zoning allow agriculture as a permitted use by right in any district?	YES	Only in Agricultural Zone. Excluded from residential and business zones.
Does zoning prohibit agriculture in any district other than hamlet centers or commercial areas?	NO	Yes, excludes in residential zones. These are narrow 'strips' located along major roads. It is noted however that some of the agricultural

Agriculture-friendly Criteria	Newport	
	Status	Notes
		parcels overlap and have farmlands located within the residential districts. Farm definition excludes hog farming of 50+ animals and fur bearing animal farm from all districts.
Are special use permits for agriculture or ag-related uses are required in one or more districts?	YES, FOR SOME USES	Requires special use permit for farm labor housing using a mobile home, slaughterhouse, solar farms. Prohibits split/cloven-hoofed animals, fowls, fur bearing animals and honeybees for any purpose in residential zones (not Ag zone though.)
Is residential, higher density or commercial growth allowed in core farm areas or where a NYS Ag District exists so that conflicts may arise?	YES	Yes, residences are allowed with a 2-acre minimum lot size
Does the zoning establish a local agricultural zoning district, ag overlay district, or special use district for agriculture?	NO	There is an Agricultural zone, but it is not exclusively for agriculture. It also includes all R1 and R2 uses, as well as limited commercial uses oriented to rural areas such as camps, fish and game club, B&B, sawmill, etc.
Does the zoning allow farms to have more than one business or offer flexibility to accommodate the needs of agricultural businesses?	NO	Not Mentioned specifically. Two primary residences are allowed if all lot requirements are met. The exception for this is farm labor housing which is allowed.
Are buffer zones between farmland and residential uses required for new construction or subdivision?	NO	
Are innovative development patterns that preserve farmland encouraged, allowed, or mandated (conservation subdivision, clustering, TDR)?	NO	
Are off-site or on-site signs allowed to attract and direct people to farm stands?	YES	Yes, allowed – specifically allows for signs for seasonal farm stands on property only when products grown there are for sale, and to be sized <24 square feet in size. Directional signs also allowed.
Are farm stands, farm retail markets, agri-tourist businesses, breweries, etc. allowed?	PARTIALLY	Farm stands only. No others discussed.

Agriculture-friendly Criteria	Newport	
	Status	Notes
Are farm processing facilities such as community kitchens, slaughterhouse, etc. allowed?	YES, WITH SPECIAL USE	Slaughterhouses allowed with special use permit in the Ag zone. However, definition of agriculture includes accessory uses for packing, treating or storing produce. This is unclear if it means food processing, slaughtering etc.
Farm stands are not limited to selling just products from that one farm?	YES LIMITED	As per definition, farm stands can only sell products primarily grown on premises.
Do farm stands need a site plan review or special use permit?	NO	
Does zoning allow for accessory uses such as greenhouses, barns, garages, equipment storage etc. permitted as of right?	YES	Yes, allowed, but in rear yard only as per table.
Do application requirements include asking for submittal of information or maps about farming that might be taking place on or near the project parcel? Whether it is in an ag district? What farming activities take place on or near the site? Whether prime farmland soils are present?	NO	
Do standards exist that require the PB or ZBA to evaluate impacts of a project on agriculture?	NO	
Do any design standards exist to direct building envelopes to areas on a parcel that would still allow farming to occur on remaining open spaces?	NO	
Does the regulation define agriculture, agricultural structure, farm worker housing, agri-tourism, agri-business?	SOME	Defines agricultural data statement, agricultural, farm, farm stand, stable. Does not include any of the ag-tourism or other farm types.
Are farm-related definitions broad and flexible and not confined to a certain number of acres or income earned?	REQUIRES ACREAGE	Requires a farm to have a 10-acre minimum lot size. Agricultural excludes hog farms > 50 animals and fur bearing farming.

Agriculture-friendly Criteria	Newport	
	Status	Notes
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 onsite?	LIKELY	Farm stands are allowed. Farm accessory buildings are exempt from zoning permit. Farm definition includes processing, handling and practices which contribute to the production, preparation and marketing of crops, so I would interpret this to be yes, these are allowed on the farm. May have conflicts with the agricultural definition.
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	
Does the community require placement of an ag disclosure statement on plans or plats when development takes place in a NY certified ag district?	NO	
Are ag-related uses required to get a special use permit or go through site plan review?	SOME	Slaughterhouse
Does the regulation define and allow for farm worker housing? Are mobile homes allowed as farm worker housing?	YES	While migrant labor camps are not allowed anywhere (not defined either), farm labor housing is allowed with a special use permit.
Are silos and other farm structures exempt from height requirements?	YES	Exempts farm structures from height requirements.
Are personal windmills and solar panels allowed for farms? With permits or permitted as of right?	ALLOWED	For Solar – they are allowed but agricultural use of solar is not discussed. Farms desiring to put solar panels up for farm use would need to comply with side and rear yard setbacks. Requires special use permit for commercial solar farms.

Agriculture-friendly Criteria	Schuyler	
	Status	Notes
Comprehensive Plan (2019)		
Does the plan have a section on agriculture?	YES	Has a separate section describing current conditions of agriculture.
Does the plan include maps of agricultural lands, important farmland soils, agricultural districts, etc.?	SOME	Includes maps from 2002 Herkimer County Agricultural and Farmland Protection Plan (Ag District and Farmed Parcels, major farm types, vacant lands)
Does Plan explore role of agriculture in the community? Was a survey done and included questions about agriculture?	YES	They did include a farm/agricultural needs survey. Definitely includes role of ag in community.
Does the vision statement or goals address agriculture in any way? Is there any visible demonstration of the value of agriculture to the community in the plan?	YES	Agriculture mentioned in the vision statement.
Does the plan consider agriculture as an important resource in Town?	YES	In many places this is stressed.
Does the plan recognize or reference a local or County agriculture and farmland protection plan?	YES	VERY WELL DONE
Does the plan include any data on farms and farmland? Acreage? Income or occupations from farming or other demographic data?	YES	
Does the plan establish policies towards farmland and farming?	YES	They want to improve the atmosphere for farm operations; maintain farming as a primary industry in Town; encourage/support/preserve agricultural uses, develop new ag programs and make farm community aware of existing programs that could be of assistance.
Does it identify the value of farmland and farms to the community?	YES	Very strong.
Does it offer any recommended actions related to farming or farmland or ways to preserve or enhance farming?	YES	Details farm assistance program, need for farmland protection, support ag-businesses, work with NYS Ag and Markets for programming

Agriculture-friendly Criteria	Schuyler	
	Status	Notes
Does the plan establish a policy and/or future actions for the agricultural use of open space that may be created in a conservation subdivision or clustering?	YES	
Does the plan discuss NYS agricultural districts and how the town can be supportive of that?	YES	
Does it consider farmland a natural resource and encourage easements or other protections of that land? Is there a policy discussed for PDR, LDR or TDR?	PARTIALLY	The plan talks about farmland and its importance and the need to preserve farmland but does not specifically talk about land use programs that use easements or other methods.
Is agriculture a consideration of where growth does or does not take place?	NO	Plan is not that specific.
Zoning		
Does the regulation's purpose statement include a discussion of agriculture, or promoting or preserving agriculture specifically?	YES	Yes, mentions specifically agriculture and prime farmlands
Does zoning allow agriculture as a permitted use by right in any district?	YES	In the RA (Residential Agricultural) district. Ag not allowed in R1, R2, or RM. Commercial Highway allows for dairy processing plant, commercial greenhouse and wayside stand as a permitted use. CI district allows for cold storage or meat packing plant as a permitted use.
Does zoning prohibit agriculture in any district other than hamlet centers or commercial areas?	YES	In R1, R2, and RM districts
Are special use permits for agriculture or ag-related uses required in one or more districts?	YES	Livestock sales/auction house, sawmills, cold storage, ag produce processing plants need special use permits in the RA district. Ag operations including commercial woodlots and tree farms, nurseries, wayside stands, farm buildings when accessory to an operating farm are all permitted uses.
Is residential, higher density or commercial growth allowed in core farm areas or where a NYS Ag District exists so that conflicts may arise?	NOT REALLY	For the most part, residential and commercial business districts are not in core farm areas.

Agriculture-friendly Criteria	Schuyler	
	Status	Notes
Does the zoning establish a local agricultural zoning district, ag overlay district, or special use district for agriculture?	NO	
Does the zoning allow farms to have more than one business or offer flexibility to accommodate the needs of agricultural businesses?	YES	Does specifically allow multiple principal buildings on an operating farm.
Are buffer zones between farmland and residential uses required for new construction or subdivision?	NO	
Are innovative development patterns that preserve farmland encouraged, allowed, or mandated (conservation subdivision, clustering, TDR)?	NO	
Are off-site or on-site signs allowed to attract and direct people to farm stands?	YES	
Are farm stands, farm retail markets, agri-tourist businesses, breweries, etc. allowed?	YES, BUT NOT ALL	Farm stands, called wayside stands, are allowed. Other ag-related businesses not mentioned.
Are farm processing facilities such as community kitchens, slaughterhouse, etc. allowed?	YES	In business zones – dairy processing, greenhouse, wayside stand, cold storage, meat packing all allowed as permitted uses in the commercial districts. Some of these same uses are specifically allowed with a special use permit such as livestock sales, sawmill, cold storage, processing plant.
Farm stands are not limited to selling just products from that one farm?	NO MENTION	
Do farm stands need a site plan review or special use permit?	NOT IN RA DISTRICT BUT YES IN OTHERS	
Does zoning allow for accessory uses such as greenhouses, barns, garages, equipment storage etc. permitted as of right?	YES	In RA district.

Agriculture-friendly Criteria	Schuyler	
	Status	Notes
Do application requirements include asking for submittal of information or maps about farming that might be taking place on or near the project parcel? Whether it is in an ag district? What farming activities take place on or near the site? Whether prime farmland soils are present?	NO	
Do standards exist that require the PB or ZBA to evaluate impacts of a project on agriculture?	NO	
Do any design standards exist to direct building envelopes to areas on a parcel that would still allow farming to occur on remaining open spaces?	NO	
Does the regulation define agriculture, agricultural structure, farm worker housing, agri-tourism, agri-business?	VERY LIMITED	Agriculture and farm, greenhouse, stable, wayside stand are those terms included and defined.
Are farm-related definitions broad and flexible and not confined to a certain number of acres or income earned?	RESTRICTIVE	Farms must be > 5 acres. They specifically exclude fur bearing farms, riding academies, boarding stables, . Nursery and greenhouse need 2 acres, wayside stand needs 1 acre with a maximum size of 500 square feet and 300' side and rear setbacks. Bee keeping requires 200' setback.
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 onsite?	YES	Multiple uses are allowed per parcel on an operating farm
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?	NO	
Does the community require placement of an ag disclosure statement on plans or plats when development takes place in a NY certified ag district?	NO	

Agriculture-friendly Criteria	Schuyler	
	Status	Notes
Are ag-related uses required to get a special use permit or go through site plan review?	YES	Several ag-related uses do need a special use permit even in the RA district.
Does the regulation define and allow for farm worker housing? Are mobile homes allowed as farm worker housing?	YES	Allows for additional dwelling units in accessory buildings for farm employees. These buildings are exempt from other accessory structure dimensions and siting setbacks. It does appear as if use of mobile homes for farm worker housing is allowed provided the mobile home meets the standards of the zoning law.
Are silos and other farm structures exempt from height requirements?	YES	There is no height requirement for ag structures
Are personal windmills and solar panels allowed for farms? With permits or permitted as of right?	YES	Ground mounted systems for all uses except solar farms (utility scale) need a building permit and must meet setbacks. The law does not pull out solar use on farms.
Other Notes		Agriculture is exempted from stormwater pollution prevention rules and erosion/sedimentation control permit requirements.

Overall Observations of Town Land Use Plans and Laws

1. The three towns having comprehensive plans included in the audit do address agriculture in some way – some more detailed than others. All incorporated input from the public about the critical role agriculture plays in their community. Public comments showed a high level of support for agriculture. In all three, agriculture is mentioned as an important land use in that town and vision and goals reflect that level of importance. Overall for the County:
 - a. Of the 19 towns in Herkimer County, seven towns do not have comprehensive plans, including Manheim (part of this audit). Of those seven, four do not have zoning regulations either. For those towns with comprehensive plans, six of them (50%) have plans that were written before year 2000 – some of them date back to the 1960’s. Five towns have comprehensive plans written recently (2011 through 2019). Seven towns have zoning laws also written before year 2000 – most of them from the 1980’s and 1990’s. One town has a comprehensive plan but no local zoning. So, while there does not seem to be an overall pattern, it does seem that there is a need county-wide to enhance comprehensive planning and updating of local regulations to address the needs identified in those plans. From an agricultural perspective, conditions have changed over the past 10 to 20 years and local plans and regulations should address those in order to provide towns with the most up to date data and methods to ensure farming remains viable. The audit confirms that viable agriculture is indeed an important goal.
2. Zoning and comprehensive plans should be consistent with each other. Only a few towns have a zoning law that is up to date with their plan, and many laws are quite old. Zoning should be designed to meet current and future community needs. A comprehensive plan is an important tool to guide future zoning updates. Four towns have relatively new plans and have zoning laws adopted about the same time. Two towns have an old plan but newer zoning, and two towns have a new plan but have not yet updated their zoning. Four towns have an old plan and an old zoning law.
 - a. Agricultural operations and overall land uses have changed significantly in the last 10 to 20 years. The major land use change has been the introduction of new residential structures in farm areas (see Figure 2). Introduction of non-farm uses into farm areas can make it more difficult for farmers to continue their operations and often promotes nuisance complaints against farmers. This can make it harder for farms to operate. Towns can use information from the County Plan to help them make decisions about where/what non-farm growth can be consistent with agriculture. Further, zoning laws can be more expansive in their definitions and allowance of a variety of agricultural operations to ensure that future zoning doesn’t place barriers on farms as they seek to diversify or change.
3. Overall, a common observation is that the Plans were very pro-agriculture but the zoning laws more restrictive and not up to date with use of definitions, agricultural uses, and planning techniques that serve to promote farming and farmland protection. Zoning laws should have strong purpose statements that establish the desire to protect and encourage farms and to

include the wide diversity of current agricultural practices as important land uses. This one change would make a closer tie between a pro-farm plan and zoning.

4. Where a town has and wants to continue farming operations, the zoning law should position agriculture front and center as a primary and desired land use. All four towns included in the audit allow for residential, and sometimes other commercial land uses in agricultural areas. This is certainly acceptable, but additional development standards or guidelines can be included in the zoning to better enable the mixing of farm and non-farm uses.
5. Zoning regulations should be reviewed to ensure they are up to date to address changes in state authorizing rules (such as time frames and Planning Board and Zoning Board of Appeals voting requirements). Further, all the laws appear to need to be updated to include new topics that often affect farms now such as agri-tourism on farms, breweries/distilleries, solar farms for farm use and utility scale energy production on farms, use of buffers to separate farm and non-farm uses, and use of conservation subdivision or other modern residential subdivision and siting techniques.
6. Most towns have subdivision laws, but two do not. Without such regulations, land development for residential development is not reviewed for any impact on the community, roads, the environment or agriculture. Without a subdivision law, there is no mechanism for input, for evaluating potential conflicts with agriculture, or limiting fragmentation of farmland.
7. The level of detail included in plans including data, maps and specific information documenting the current state of agriculture varies. Some information is given in each plan but mapping of soils and NYS Agricultural Districts is sporadic. Basic mapping would help municipalities adequately plan for agricultural land uses. These maps, shown at the County level in this Plan, should include land uses, parcels that receive agricultural assessments, natural resources that influence farming such as soils, topography and wetlands, and locations of NYS Agricultural Districts. Maps or descriptions that show locations of water and sewer infrastructure and locations where non-farm development has taken place would also offer significant information to help in project review and development. Some communities find it helpful to also map viewsheds that farms may contribute to, locations of farmers markets, farm stands, and agri-tourism operations. It is recommended that as part of implementing this Plan, the County provide these maps at the town level to each municipality so that they have this tool to use in local planning efforts.
8. None of the regulations include specific land use tools that could benefit agriculture such as conservation subdivision design, use of agricultural buffers when subdivision occurs, or modified site plan review to facilitate new agricultural uses. None provide any guidance for site layout or include development standards that serve to direct new non-farm building to locations that would help minimize adverse interactions between farm and non-farm uses.
9. All the laws reviewed allow agriculture as a permitted use without any kind of review and that is positive. However, they all place barriers on agriculture by narrowly defining what a farm is based on minimum acreage required to be considered a farm. A 10-acre minimum lot size for agriculture not only is likely to clash with NYS Ag and Markets 25-aa rules, but this excludes small, niche, or start-up farms that may be commercially viable but do not meet acreage requirements. This alone is a significant challenge to farming.

10. Agriculture can be highly impacted by new non-farm uses that take place near or adjacent to a farm operation. More emphasis needs to be placed in the planning and permitting process on how non-farm development interacts or affects existing farms. This is especially critical when a farm is in a NYS Agricultural District. One method to help farmers and the broader local community understand those potential impacts on agriculture when non-farm development takes place is through use of the Agricultural Data Statement. Long-required by AML 25-aa in the planning review process, but often not used, the Ag Data Statement ensures that adjacent farmers are aware of a project proposed in the Ag District and to have the opportunity to offer their input. Zoning should require site plan, special permit and subdivision applicants to provide the reviewing board information on where and what type of farming might be nearby and whether the parcel is in a NYS Agricultural District can ensure that the reviewing board has the information needed to fully evaluate a proposal's impact on agriculture. This report includes a model agricultural data statement and it is recommended that the County provide this to each town planning board along with instructions on its use.
11. None of the towns included in the audit ask for any information about agriculture on their site plan or special use permit applications. That means that the Planning Board has no information about ag uses, ag soils, ag districts, or other nearby ag activities that they would need to pay attention to. This is especially important when a project is reviewed that is in or within 500 feet of a NY ag district and leaves the Board without good information upon which to determine if there are any impacts to agriculture. These requirements should be added into zoning and subdivision review processes.
12. Although limitation of farms by number of allowed animals is rare in Herkimer County, it does occur. For example, some exclude cloven/hoofed animals and one town excludes hog farms > 50 animals. When a farm is in a NYS Agricultural District, these zoning limitations are likely to be seen as over-regulation by the State.
13. These days, many farms require growing, processing and selling of their products as part of their farm businesses. As such, they often have multiple businesses on the farm property and a agriculture-friendly zoning law would allow for this and offer details. One of the goals is not to make either the Planning Board or the landowner guess at what a zoning law allows or not. It is better to specifically outline these uses and any review process or standards the Town might require so that the process is clear and timely approvals can be achieved.
 - a. None of the zoning reviewed clearly articulated whether multiple uses on one farm were allowed or not, although in some it could be inferred that these other uses might be accessory uses to the farm.
 - b. All the laws could be strengthened by clarifying and expanding allowance for this type of farm operation.
 - c. Zoning would be strengthened to promote farming if they outlined exactly how multiple aspects of farming, farm processing, and farm selling are handled.
 - d. Most of the Town laws are silent about land use regulations for food processing and slaughterhouses. When a law is silent on that matter it often means those uses are prohibited. At best it is unclear if they are allowed. Food processing on a farm is considered part of the farm operation and that should be clarified in zoning definitions.

- e. However, new uses such as commercial kitchens, food hubs and food distribution centers and small cheese plants (for example) should be included and addressed as a critical component of the necessary modern farm infrastructure.
 - f. Off-farm food processing and small slaughterhouses are important and can be uses that can fit into light industrial or other business zones. It is recommended that some consideration should be given as well for on-farm processing.
14. None of the laws require new residential uses to provide their own setback or buffer when adjacent to a farm. Farm buffers should be evaluated and included in zoning laws to minimize farm and non-farmer conflicts.
 15. Local plans and laws should consider inclusion of the conservation subdivision design method or other siting tools to allow for the maintenance of open land that can be farmed and to site new non-farm buildings in a way that doesn't adversely affect farm operations. Such tools include use of conservation subdivision for major developments that allows for agriculture to take place on the preserved open space. Conservation subdivisions oriented to farmland protection should be included in the land use toolboxes of Herkimer County towns.
 16. Overall, ag-related definitions are inconsistent. Some use the State definition or portions of the State definition. That does offer flexibility. They are also a 'known entity' and have many years of known interpretation which can lend support and flexibility to a farm operator. Each law reviewed includes a basic definition of agriculture, but these may not be fully consistent with NYS Department of Agriculture and Markets guidance. Definitions of agriculture that include acreage limitations may be considered overly restrictive, especially when a farm is in a NYS Ag District.
 17. It may be helpful to have local solar laws discuss the use of solar panels used to power a farm operation. Those kinds of solar panels are considered a farm structure by New York State and part of that farm operation if they produce no more than 110% of the farm's power needs. While none of the reviewed laws would prohibit use of solar on farms, it might benefit farms to explicitly recognize that solar panels used to power farm operations are considered a farm structure.

Strategies that can improve local planning for agriculture

1. Promote development of new or updated comprehensive plans.
 - Plans should include basic data on the number and types of farms in the municipality, where they are operated, and acreage in farmland.
 - Maps should include soils, location of agricultural districts, farmed parcels, and parcels that receive an agricultural assessment, viewsheds, natural resources, locations of water and sewer infrastructure, and locations where non-farm development has taken place.
 - Some communities find it helpful to also map locations of farmers markets, farm stands, and agri-tourism operations.
2. Public input should be collected to gauge public interest in farms and farmland and to identify future desires and direction for farming in the community.
3. Assuming agriculture remains an important land use, the plan should offer strategies and actions the Town could take to ensure agriculture remains sustainable.

4. After comprehensive plans are updated or developed, encourage the Town to work diligently to translate the plan's direction into land use policies and regulations so that plans and laws are consistent. Only a few Towns in Herkimer County with up-to-date plans have also updated their regulations to reflect those policies.
5. The County can assist in improving the farm-friendliness by:
 - Providing towns with maps of prime farmland soils, soils of statewide importance, and agricultural districts when they are writing or updating a plan.
 - Providing other data from the Ag Census, US Census, and other sources to provide them with a snapshot of the quantity (acres, farms, parcels, volume) of agricultural activities taking place in the community.
 - Providing sample goals related to promoting and strengthening agriculture that they could consider.
 - Providing a toolbox of options and strategies that towns could consider including in their local plan.
 - Providing a set of agriculturally related definitions that could be used in local laws.
 - Providing language for a modified site plan review to be used when the municipality feels it critical to review certain farm operations such as livestock operations that may be located near streams or wetlands instead of a special use or conditional use permit process.
 - Provide training and informational materials to towns to show the benefits of agriculture in the community.

Agricultural planning tools

The following tools could be helpful in Herkimer County:⁸

Conservation Subdivision: Local zoning and subdivision laws can include an option or requirement that new subdivisions be designed with this technique. While similar to a clustered subdivision, a conservation subdivision is designed with a process that prioritizes the identification of key resources such as active farmland first. Contrary to conventional subdivisions which site new houses and roads first, a conservation subdivision results in a layout that preserves the most important features of the parcel and permanent open space. A conservation subdivision results in strategically located houses which may or may not be clustered together.

Clustered Subdivision: A subdivision layout technique that results in a 'clustering' of new houses on one location within a parcel to allow a large portion of land to remain open and available for preservation of natural resources or farmland.

Buffers: Buffers reduce conflicts between new residents and nearby farm operations. Buffers can be as variable in size or width and are kept undeveloped to screen out the sights, sound and smells from a nearby farm operation. In areas where vegetation does not exist, buffers could require tree or shrub plantings to further reduce the movement of dust or sounds. Buffers are required as part of new

⁸ This text is adapted from Planning for Agriculture in New York: A Toolkit for Towns. Written by David Haight and Diane Held. 2011. American Farmland Trust, Saratoga Springs, NY. 80 pages plus CD.

residential subdivisions and never from the existing farm. Buffers are part of but not a complete solution to minimizing conflicts between farms and non-farms.

Agricultural Overlay District or Agricultural Zones: A zoning district or overlay district designed intended to support farms and farm businesses. These districts may have a very low minimum lot size or density, limit the number of residential or non-farm uses, require prime farmlands to be preserved, or allow non-farm uses only with a special use permit. The emphasis in these districts is to preserve farmland and encourage farm operations.

Use of Dwelling Per Acre and Average Lot Size instead of Minimum Lot Size: Many communities establish a minimum lot size to regulate density. In Herkimer County, most zoning laws set a 1-acre or 2-acre lot size. Although easy to use, a minimum lot size does not usually stabilize the agricultural land base and a 1 or 2-acre lot size often means the landscape is split up into many small parcels leaving little viable farmland behind. The minimum lot size has also been criticized for being exclusive and limiting the availability of affordable lots. Minimum lot size approach has had little success in limiting development of farmland. Ideally, the minimum acreage requirement should approximate the size of a farm field that is economically viable for continued agricultural use. This may range from 20 to 40 acres in New York. It is recognized that such low density may be difficult to establish in many municipalities.

An alternative would be for a municipality to use a true density measurement (dwellings per acre) and allow that to be averaged over the entire parcel. This method sets a fixed density for residences in a zoning district. For example, if the residential density was at one dwelling per 10 acres, a 100-acre parcel could have ten residences – each of which could be as small as possible and still meet water and septic requirements. This allows for much of the land to be left as open space. Some communities combine density with a maximum lot size to ensure residential development results in viable farmland. Density averaging allows for use of an average lot size. So for example, if a 100-acre lot with a 10 acre density yields 10 new residential lots, they could all be different sizes, some small and some large, provided that they average 10 acres. Combination of density and averaging can be a very flexible and powerful tool that still yields development potential for landowners.

Incentive Zoning: Municipalities may offer an incentive to a land developer in return for some desired amenity. In the case of farmland, a community could offer a residential density bonus in return for a percentage of the parcel being permanently protected and available for farm use. Density bonuses and other incentives are regulated in New York through Town Law 261-b.

Appendix E: Sample Agricultural Data Statement

Instructions: This form must be completed by the applicant for any application for a special use permit, site plan approval, use variance or a subdivision approval requiring municipal review that would occur on property within 500 feet of a farm operation located in a NYS Ag and markets certified Agricultural District or otherwise.

1. Name and Address of Applicant: _____

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

 Special Use Permit Site Plan Approval Use or Area Variance Subdivision Approval
3. Description of proposed project to include (1) size of parcel or acreage and tax map identification number of tax parcel(s) involved; (2) the type of action (single-family dwelling or subdivision, multifamily development, apartment, commercial or industrial, school, non-residential use, etc., and (3) a brief description of the project size, intensity, density of homes, etc. (Please provide this information on the reverse side of this application and attach additional description as necessary).

4. Is this parcel within Agricultural District #1? Yes No

5. Is this parcel actively farmed? Yes No

6. List all farm operations within 500 feet of your parcel boundary. Attach additional sheets if necessary.
 - A. Name: _____
Address and Telephone #: _____
Type of Farm: _____
Is this parcel actively farmed? Yes No
 - B. Name: _____
Address and Telephone #: _____
Type of Farm: _____
Is this parcel actively farmed? Yes No
 - C. Name: _____
Address and Telephone #: _____
Type of Farm: _____
Is this parcel actively farmed? Yes No

7. Signature of Applicant: _____

Appendix F. Adapting to Climate Change

Introduction

Changing weather patterns are beginning to impact our areas' farms. Predictions show that we will have milder winters, more severe storms, and shorter and wetter growing seasons. A national agricultural system that neglects soils, reduces crop and landscape diversity, and relies too heavily on fertilizers and pesticides are identified as contributing to making our farms susceptible to climate impacts. Tools are available however, to help buffer farmers from such adverse impacts and to assist their operations to become more resilient and sustainable for the long term.

This report discusses the issues and impacts of climate change; it identifies factors that make a farm more or less climate resilient; analyzes what contributes to climate resiliency; and offers options and strategies that Herkimer County and area farmers can consider.⁹

The Changing Climate in Herkimer County

According to the Climate Smart Farming website (climatesmartfarming.org), the following information characterizes how the climate has changed (1980-2013) and how it is projected to change over the next century:

Trends:

Annual Average Temperature: +0.60 degrees Fahrenheit per decade

1950 was 42.0 degrees, 2090 prediction with high emissions is 53.0 degrees (climate model average with high carbon emissions)

Annual Average High Temperature: +0.32 degrees F per decade

1950 was 53.0 degrees, 2090 prediction with high emissions is 63.4 degrees (climate model average with high carbon emissions)

Average Low Temperature: + 0.89 degrees F per decade

1950 was 30.9 degrees, 2090 prediction with high emissions is 42.7 degrees (climate model average with high carbon emissions)

Days with Highs > 90 degrees: +0.06 days per decade

1950 was 0 days, 2090 prediction with high emissions is 40.9 days (climate model average with high carbon emissions)

Growing Season Length (Consecutive days > 32 degrees F): +12.38 days per decade

1950 was 125 consecutive days, 2090 prediction with high emissions is 168 days (climate model average with high carbon emissions)

Annual Growing Degree Days, base of 50 degrees F: 88.95 growing degree days per decade

⁹ *Climate Change and Agriculture: A Perfect Storm in Farm Country*. March 2019. Union of Concerned Scientists.

1950 was 1623 degree days, 2090 prediction with high emissions is 3672 degree days (climate model average with high carbon emissions)

Total Annual Precipitation: +1.95 inches per decade

1950 was 49.6 inches, 2090 prediction with high emissions is 53.1 inches (climate model average with high carbon emissions)

days with Heavy Precipitation > 1 inch: +0.57 days per decade

1950 was 2.5 days, 2090 prediction with high emissions is 5.1 days (climate model average with high carbon emissions)

More specific impacts include:

1. Changing precipitation patterns. Rainfall patterns across the country have begun shifting. These changes are likely to intensify over the coming years, bringing more intense periods of heavy rain and longer dry periods, even within the same regions.
2. Changing temperature patterns. Farmers in all regions will likely be affected by rising average temperatures, more extreme heat, fewer sufficiently cool days during the winter, and more frequent cold-season thaws.
3. Flooding, droughts, changes in crop and livestock viability, and new pests, pathogens, and weed problems.
4. Floods. Many agricultural regions of the country, including upstate New York, have seen an increase in flooding. These floods are costly as they devastate crops and livestock, accelerate soil erosion, pollute water, and damage infrastructure.
5. Droughts. Too little water can also cause extreme damage. Severe droughts have taken a heavy toll on crops, livestock, and farmers in many parts of the country over the past decade. Rising temperatures will likely cause droughts to be worse, depleting water supplies and possibly spurring wildfires.
6. Changes in crop and livestock viability. Farmers in Herkimer County generally select crop varieties and animal breeds that are well suited to our local conditions. As those conditions shift over the coming decades, farmers may need to rethink some choices. This may mean making new capital investments, finding new markets, and learning new practices.
7. New pests, pathogens, and weed problems. Farmers will also need to cope with new threats. An insect or weed that couldn't thrive north of the Carolinas in decades past may find upstate New York a perfect fit down the road, and farmers will need to adapt.

Certain conditions and practices can amplify the adverse impacts of changing weather patterns. These include degraded soils, simplified landscapes, and intensive inputs.

1. Degraded soils. Monoculture cropping systems generally leave soil bare for much of the year. They rely on synthetic fertilizer and plowing fields regularly. Such practices can leave soils low in organic matter and prevent the formation of complex root systems. This can reduce water-holding capacity and increase vulnerability to erosion and water pollution.

2. Simplified landscapes. Some farm practices such as monocrops minimize biodiversity. Lack of diversity in farming operations leads to greater risk, amplifying climate impacts, including changes in crop viability and encroaching pests.
3. Intensive inputs. Heavy reliance on fertilizers and pesticides may become more costly to farmers as climate impacts accelerate soil erosion and increase pest problems.

Climate resilient farming

Farmers across the country have experienced changes in weather over the last 20 years or so, making it more difficult to produce crops and livestock. In the Midwest and the Northeast, more frequent heavy spring rainfalls have complicated fieldwork and brought catastrophic flooding. As winters warm and growing seasons lengthen, pest populations are increasing. Warmer winters and springs cause fruit trees to bloom earlier increasing the risk of fruit crop failure due to freezes. In many regions, producers are struggling to manage more periods of higher temperatures and dry weather.

Climate resilience has been defined as the ability to anticipate, absorb, accommodate, or recover from climate change in a timely and efficient manner. Being ‘resilient’ generally means that there is capacity to absorb certain changes while still retaining function and structure; learning and adjusting, and creating new systems when the original is not functioning. Resilience of a system therefore results from the interactions between these features, as well as from the degree to which the broader system is capable of organizing to address each of these.

Resilient agricultural principles that have proven to be useful to combat weather variability include an emphasis on soil health, diversified production systems, paying attention to ecological systems and having diversified, high-value marketing.

“Healthy soils buffer the farm or ranch from the increased variability and extremes in precipitation that currently challenge farmers and ranchers throughout the country. Diversified production systems build soil health and spread climate risks through the growing season, reducing potential losses from any single weather event. Ecological design reduces climate risk by creating production systems that are well adapted to the local landscape and climate. Ecological design also enhances ecosystem services that buffer production from weather-related disturbances and reduce costs. Diversified, high-value marketing spreads climate risks across multiple markets, improves profitability and produces social capital, all of which enhance capacity to respond to challenging climate conditions and to recover from climate-related damages.”

From Cultivating Climate Resilience on Farms and Ranches (Bulletin) by Laura Lengnick, adapted from her 2015 book *Resilient Agriculture: Cultivating Food Systems for a Changing Climate*; USDA Sustainable Agriculture Research & Education.

Resiliency Options

There are new, climate-resilient ways to produce our food. These include building healthier soils through practices that increase soil’s capacity to soak up heavy rainfall and hold water for dry periods by planting cover crops and deep-rooted perennials. Resiliency can be enhanced by redesigning farms as more diverse

agroecosystems. This means strategies such as reintegrating crops and livestock; incorporating trees and native perennials; and reducing dependence on fertilizers and pesticides. Developing new crop varieties, livestock breeds, and farm practices can also help farmers adapt to evolving climate realities is important.

“Storing water in soil decreases the negative impacts of droughts. Several grey measures are available, and include measures based on the use of technology in agriculture, e.g. no-tillage, or cropping systems implemented to reduce water runoff. Runoff, depending on soil characteristics, can be delayed by tillage methods combined with plants having a high root density and lush surface cover. Conservation tillage, including both no-tillage and minimum tillage, is the practice of limiting or eliminating tillage practices (ploughing in particular), leaving some of the previous season's crop residues on the soil surface. It reduces evaporation from the soil surface, preserving soil organic matter in the upper soil layers and, consequently, increasing water retention capacity of the soil. Terracing and contour ploughing terrace is another method of soil conservation to slow or prevent the rapid surface runoff. Contour ploughing is the farming practice of ploughing across a slope following its contours, which have the effect of slowing water run-off during rainstorms so that the soil is not washed away and allows the water to percolate into the soil. The rows made by the plough run perpendicular rather than parallel to slopes, generally resulting in furrows that curve around the land. Efficient use of irrigation systems also helps to store the water.”¹⁰

“Fortunately, our farm and food system can be an important part of the solution, both by reducing emissions at every stage of the food production and distribution process, and by building agroecosystems that can sequester (store) more carbon.”¹¹

“The good news is that many of the best strategies for addressing climate risk are already familiar to farmers through practices commonly associated with sustainable agriculture, such as diversifying crops, livestock, enterprises and markets; improving soil health through cover crops, no-till, composting and other techniques; integrating crops and livestock; adopting management- intensive grazing; reducing the use of off-farm inputs; and using whole-farm planning.”¹²

Strategies that Herkimer County can take to have a climate resilient farming program

1. Soil and Water Conservation Districts use the Agricultural Environmental Management (AEM) Framework to plan and assess environmental risks. Farmers previously working through the AEM framework were only able to receive funding through the Agricultural Non-Point Source program (for

¹⁰ Climate-ADAPT. Improved water retention in agricultural areas (2015)

<https://climate-adapt.eea.europa.eu/metadata/adaptation-options/improved-water-retention-in-agricultural-areas>

¹¹ Climate Change and Agriculture: A Perfect Storm in Farm Country. March 2019. Union of Concerned Scientists.

¹² USDA Sustainable Agriculture Research & Education. Cultivating Climate Resilience on Farms and Ranches (Bulletin) by Laura Lengnick, adapted from her 2015 book *Resilient Agriculture: Cultivating Food Systems for a Changing Climate*.

water quality concerns). Climate Resilient Farming is filling those gaps by allowing farmers to address risks proactively, while also mitigating their greenhouse gas emissions.

Agricultural Environmental Management (AEM) is a cooperative interagency program providing one-on-one help to farmers, identifying environmental risks on their property. Once the risks are identified, help to farmers includes solution planning and design, and assistance obtaining financial assistance to address existing problems and prevent future ones.

The Soil & Water Conservation Committee (SWCC) develops policy for the statewide AEM program and administers the programs. AEM is a voluntary and incentive-based program helping farmers to make common-sense; cost-effective, and science-based decisions to meet business objectives while New York State’s natural resources are conserved and protected. Farmers can document their environmental stewardship and further advance their positive contributions to their communities, our food systems, the economy, and the environment, through AEM participation. Over a third of all New York State farms participate in AEM.¹³

2. Natural Resources Conservation Service (NRCS) Practice Standards for Greenhouse Gas (GHG) Emission Reduction and Carbon Sequestration

Climate change and carbon offset trading have gained great interest in many parts of the agricultural community over the past few years. Conservation systems designed by the NRCS can often have a positive influence on the emission or storage of gases which, when in the atmosphere, can affect climate change. Greenhouse gases are important to life on earth; there are potential negative consequences of increasing greenhouse gas concentrations in the atmosphere. It’s important to recognize agricultural sources of greenhouse gases, and potential methods in which agriculture can reduce its net emissions of greenhouse gases to the atmosphere.¹⁴

GHG Benefits of this Practice Standard – There are five levels above a neutral ranking. For simplicity in understanding, the highest, best management rated practices are labeled in table #1. The fifth highest (#5) qualitative ranking is not included here as it is just one step above neutral.

Highest (#1) qualitative rankings

Practice Standard	Beneficial Attributes
Conservation cover	Establishing perennial vegetation on land retired from agriculture production increases soil carbon and increases biomass carbon stocks.
Residue and Tillage Management, No-Till/Strip-Till/Direct Seed	Limiting soil-disturbing activities improves soil carbon retention and minimizes carbon emissions from soils.

¹³ NYS Department of Agriculture and Markets, Soil & Water Conservation Committee. Accessed on Dec. 10, 2019.

https://agriculture.ny.gov/soil-and-water/soil-water-conservation-committee?utm_medium=301&utm_source=www.nys-soilandwater.org

¹⁴ Natural Resources Conservation Service, United States Department of Agriculture. Greenhouse Gases and Carbon Sequestration.

<https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/nedc/training/air/?cid=stelprdb1047542>

Anaerobic Digester	Biogas capture reduces CH ₄ emissions to the atmosphere and provides a viable gas stream that is used for electricity generation or as a natural gas energy stream.
Roofs and Covers	Capture of biogas from waste management facilities reduces CH ₄ emissions to the atmosphere and captures biogas for energy production. CH ₄ management reduces direct greenhouse gas emissions.
Combustion System Improvement	Energy efficiency improvements reduce on-farm fossil fuel consumption and directly reduce CO ₂ emissions.
Multi-Story Cropping	Establishing trees and shrubs that are managed as an overstory to crops increases net carbon storage in woody biomass and soils. Harvested biomass can serve as a renewable fuel and feedstock.
Windbreak/Shelterbelt Establishment	Establishing linear plantings of woody plants increases biomass carbon stocks and enhances soil carbon.
Silvopasture Establishment	Establishment of trees, shrubs, and compatible forages on the same acreage increases biomass carbon stocks and enhances soil carbon.
Forage and Biomass Planting	Deep-rooted perennial biomass sequesters carbon and may have slight soil carbon benefits. Harvested biomass can serve as a renewable fuel and feedstock.
Nutrient Management	Precisely managing the amount, source, timing, placement, and form of nutrient and soil amendments to ensure ample nitrogen availability and avoid excess nitrogen application reduces N ₂ O emissions to the atmosphere.
Feed Management	Diets and feed management strategies can be prescribed to minimize enteric CH ₄ emissions from ruminants.
Tree/Shrub Establishment	Establishing trees and shrubs on a site where trees/shrubs were not previously established increases biomass carbon and increases soil carbon. Mature biomass can serve as a renewable fuel and feedstock.
Forest Stand Improvement	Proper forest stand management (density, size class, understory species, etc.) improves forest health and increases carbon sequestration potential of the forest stand. Managed forests sequester carbon above and below ground. Harvested biomass can serve as a renewable fuel and feedstock.

Second Highest (#2) qualitative rankings

Contour Buffer Strips	Permanent herbaceous vegetative cover increases biomass carbon sequestration and increases soil carbon stocks.
Riparian Forest Buffer	Planting trees and shrubs for riparian benefits also increases biomass carbon sequestration and increases soil carbon stocks.
Vegetative Barrier	Permanent strips of dense vegetation increase biomass carbon sequestration and soil carbon.
Windbelt/Shelterbelt Renovation	Restoring trees and shrubs to reduce plant competition and optimize planting density increases carbon sequestration.

Third Highest (#3) qualitative rankings

Alley Cropping	Trees and/or shrubs are planted in combination with crops and forages. Increasing biomass density increases carbon sequestration and enhances soil carbon stocks.
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Riparian Herbaceous Cover	Perennial herbaceous riparian cover increases biomass carbon and soil carbon stocks.
Range Planting	Establishing deep-rooted perennial and self-sustaining vegetation such as grasses, forbs, legumes, shrubs and trees improves biomass carbon sequestration and enhances soil carbon.
Herbaceous Wind Barriers	Perennial herbaceous vegetation increases biomass carbon sequestration and soil carbon.

Fourth Highest (#4) qualitative rankings

Residue and Tillage Management, Ridge Till	Ridge planting promotes organic material accumulation that increases soil carbon. Reconstruction of ridges in the same row year after year will maximize organic matter buildup in the row. Shallow soil disturbance maintains soil carbon in the undisturbed horizons.
Solid/Liquid Waste Separation Facility	Removal of solids from the liquid waste stream improves the efficiency of anaerobic digesters. CH ₄ generation is maximized within the digester by separating solids from the liquid feedstock. Proper management of the solid and liquid waste streams increases CH ₄ that is available for capture and combustion.

3. NYS Climate Resilient Farming (CRF) Program

“Estimates of annual greenhouse gas emissions from agriculture (apart from agricultural energy use, which is classified differently) in New York State range from 5.3 to 5.4 million metric tons of carbon dioxide equivalent. Manure management is responsible for roughly 15% of the emissions; emissions from soils are slightly under a third of the total. This represents a major opportunity to reduce emissions. The Climate Resilient Farming program capitalizes on the opportunities to mitigate agriculture’s greenhouse gas emissions while strengthening the resiliency of New York State’s farms. While New York State is projected to increase precipitation overall, it is expected to come in short, extreme precipitation events in between mild droughts. This represents a major risk to farms, particularly those in low-lying or flood prone areas. Even very local downpours and cloud bursts can cause substantial damage to farms. The goal of the Climate Resilient Farming Program is to reduce the impact of agriculture on climate change (mitigation) and to increase the resiliency of New York State farms in the face of a changing climate (adaptation).”¹⁵

Program grant funds are available for projects that mitigate the impact of agriculture on climate change for greenhouse gas emissions reduction and carbon sequestration, in addition to enhancing the on-farm adaptation and resiliency to projected climate conditions due to heavy storm events, rainfall, and drought. The program is a competitive grant program, with funds applied for and awarded through county Soil and Water Conservation Districts on behalf of farmers in one of three project categories: agricultural waste storage cover and flare for methane reduction, on-farm water management, and soil health systems. Projects that may have historically applied for the Agricultural Non-point Source Abatement and

¹⁵ New York State Department of Agriculture and Markets. Climate Resilient Farming. <https://agriculture.ny.gov/soil-and-water/climate-resilient-farming>

Control program may be able to fill funding gaps through the CRF. State funds come from the New York State Environmental Protection Fund.

What changes can farmers make to address climate change?

There are several broad ways and efforts to address climate change including:

- Cover crops as green manure to build carbon in soils to store CO₂, protect and improve the soil, helps absorb and retain moisture. Cover crops include bromegrass, timothy grass, alfalfa, peas, clover, sunflowers, sunn hemp, triticale, radish, vetch, buckwheat and mustard.
- No-till farming practices significantly fewer tractor trips, reduce fuel consumption, reduce need for pesticides and fertilizer
- The Farm Hub's Small Grains project aims to recapture seed biodiversity and grow grains that are better suited to the Hudson Valley's region and climate.
- Promoting farmland ecology to enhance interactions between the farmland and surroundings. An example is planting riparian buffers to stabilize soil (especially on land that is prone to flooding) as well as improve water quality of the watershed.
- Crop diversification to mitigate the risk of crop failure

Livestock production methods linked to reduced GHG emissions include:

- For grass-based systems:
 - Access to high quality pasture (compared to mature grass)
 - Grazing on legume-grass pastures (compared to grass-only pastures)
 - Intensively managed rotational grazing
- For grain-based systems:
 - Changes in grain-to-forage ratio
 - Grinding and pelleting of feed
 - Reducing protein content
 - Addition of fats
 - Use of enzymes
 - Proper feed storage and handling practices
 - Feed high in omega-3s (alfalfa, flax, grasses, etc.)
- In general:
 - For waste management, compost systems rather than manure slurry or manure stockpiles
 - Reducing over-application of waste on land

There are several tools available for farmers to help support a farmer's decision-making related to climate-related impacts. These include:

- **Cornell Institute for Climate Change and Agriculture (CICCA)** – www.climatesmartfarming.org

They have a web-based climate smart tool to help farmers manage climate risk. They also have a climate smart farming extension team, and many resources and reference guides to best management practices to reduce emissions, increase resiliency and increase profitability. This website offers a variety of tools that farmers can use to become more resilient.

Appendix G. Supplemental Information on Federal, State and Other Programs

- A. **Model Tasks for Proposed Agricultural Economic Development Specialist:** This staff person should be multi-faceted and should concentrate on providing key expertise to help implement the established goals of this plan. These roles could include:
- Assisting in integrating agriculture into county, local, and other organization's economic development programs.
 - Access funding sources for new agricultural initiatives.
 - Work with farmers and initiate and coordinate specialized agricultural economic development activities.
 - Assist in agricultural marketing efforts and development of an agricultural promotion and marketing plan.
 - Create farm to table, farm to school and farm to institution programs.
 - Provide administrative leadership to implement this plan.
 - Support for farmers and agri-businesses in the areas of marketing, diversification, niche marketing, value-added enterprises, agri-tourism, etc.

Sample Job Description – Agricultural Economic Development Specialist

(Model from Jefferson County)

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

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

Typical Duties Include but Are Not Limited To:

Identifying Agricultural Needs and Developing Solutions

- Prepare, implement and update strategic plans for agricultural economic development.
- Facilitate the development of solutions to the needs and concerns of agriculture including the shortage of trained, skilled labor and profitable markets for agricultural products.
- Work with public and private sector interests to provide coordination of resources for the ag. industry.

- Maintain a complete knowledge and understanding of the interrelationships of resources available for agriculture.
- Help develop linkages with other nonagricultural industries.
- Work with natural resources agencies to provide for an assessment of natural resources in Jefferson County.

Agricultural Financing

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

Agricultural Marketing

- Identifying, developing and implementing promotion and marketing programs of agricultural products and opportunities, and the importance of the agriculture industry in Jefferson County.
- Explore and utilize leads and opportunities in marketing and funding agriculture in Jefferson County.
- Promote better brand recognition of Jefferson County agricultural products.

Education and Public Relations

- Facilitate the development and implementation of programs training students in agricultural industries and careers.
- Assume role as a spokesperson for agriculture. Serve as ombudsman for the local agriculture industry.
- Support and serve as a resource to the County Agricultural and Farmland Protection Board.

B. **Local Food Promotion Program (USDA):** The Local Food Promotion Program (LFPP) offers grant funds with a 25% match to support the development and expansion of local and regional food business enterprises to increase domestic consumption of, and access to, locally and regionally produced agricultural products, and to develop new market opportunities for farm and ranch operations serving local markets. There are two types of project applications accepted under LFPP—planning grants and implementation grants. Applicants can apply for either but will receive only one type of grant in the same grant cycle.

C. **Regional Food System Partnerships (USDA):** The Regional Food System Partnerships (RFSP) program supports partnerships that connect public and private resources to plan and develop local or regional food systems and encourages food economy viability and resilience. AMS will solicit applications from eligible partnerships, which include at least one eligible entity and at least one eligible partner. Eligible entities include:

Producers

Producer networks or associations
Farmer or rancher cooperatives
Majority-controlled producer-based business ventures
Food councils
Local or tribal governments
Nonprofit corporations
Economic development corporations
Public benefit corporations
Community-supported agriculture networks or associations
Regional farmers' market authorities

Eligible partners include:

State agencies or regional authorities
Philanthropic organizations
Private corporations
Institutions of higher education
Commercial, Federal, or Farm Credit System lending institutions

- D. **Dairy Business Innovation Initiative (USDA):** The Dairy Business Innovation (DBI) Initiatives support dairy businesses in the development, production, marketing and distribution of dairy products. DBI Initiatives provide direct technical assistance and grants to dairy businesses, including niche dairy products, such as specialty cheese, or dairy products derived from the milk of a dairy animal, including cow, sheep and goat milk. These initiatives specifically focus on:
- Diversifying dairy product markets to reduce risk and develop higher value uses for dairy products.
 - Promoting business development that diversifies farmer income through processing and marketing innovation.
 - Encouraging the use of regional milk production.

Farm Credit East – <http://www.farmcrediteast.com>

Provides financial products, services and management support for agricultural business. “The # 1 financial services cooperative for the agricultural industry” in the northeastern U.S.

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.

Farmland Protection Implementation Grants Program – Funding to purchase development rights on farmland and develop municipal agricultural and farmland protection plans.

New York State Energy Research and Development Authority (NYSERDA) – <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 - <http://www.nyserda.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/Sectors/Agriculture.aspx>

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 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.

Conservation Stewardship Program: helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority resource 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 New Farmers Website – newfarmers.usda.gov

USDA Rural Development, New York Office – <http://www.rd.usda.gov/urdev.usda.gov/ny>

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.

Appendix I. SARE Northeast NY Fact Sheet

SARE: Advancing the Frontier of Sustainable Agriculture in...

New York

Project Highlight: *To Improve the Soil, First Know the Soil*

The importance of soil health cannot be overstated. It supports vigorous plant growth by promoting the efficient use of nutrients and water, protecting against erosion and compaction, and aiding in disease and pest management. Soil health drives farm productivity and resilience against weather extremes. But the soil is an incredibly complex environment, and for farmers to improve their ground, they first need to learn about its condition.

That is why, with SARE funding, a multidisciplinary team from Cornell University created a new kind of soil assessment. Traditional soil tests, which are also important management tools, are typically limited to measuring nutrient levels and pH. They do not reveal anything about the physical structure

or microbial life present in the soil, yet such characteristics strongly influence crop yields as well as the efficiency of inputs such as water and fertilizer. In contrast, Cornell's soil health assessment reports typically include management recommendations to address specifically identified constraints and promote soil-building practices such as cover cropping, reduced tillage, the use of compost or manure, and diversified rotations that include perennial crops.

The Cornell lab handles about 2,000 samples a year and is expanding in use.

For more information, see www.sare.org/projects, and search for project numbers LNE03-175, LNE-6-235 and ENE09-110.

SARE in New York

www.nesare.org/new-york

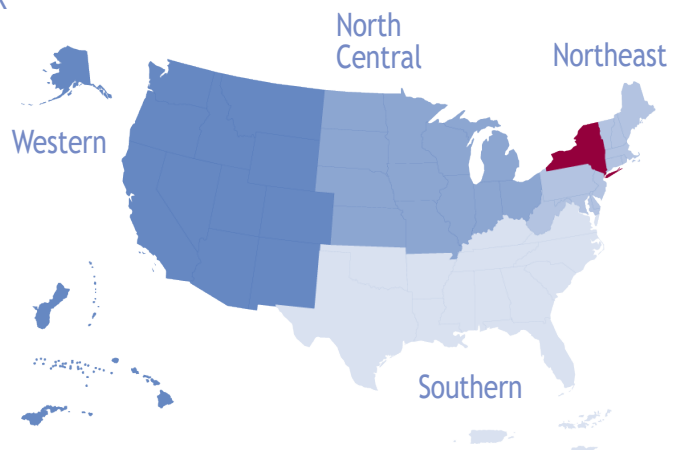
\$17.2 million in total funding

514 grant projects

(since 1988)

For a complete list of grant projects state by state, go to

www.sare.org/state-summaries



SARE's four regional programs and outreach office work to advance sustainable innovations to the whole of American agriculture.

What is SARE?

Since 1988, the Sustainable Agriculture Research & Education (SARE) program has been the go-to USDA grants and outreach program for farmers, ranchers, researchers and educators who want to develop innovations that improve farm profitability, protect water and land, and revitalize communities. To date, SARE has awarded over \$273 million to more than 6,800 initiatives.

SARE is grassroots with far-reaching impact

Four regional councils of expert practitioners set priorities and make grants in every state and island protectorate.

SARE communicates results

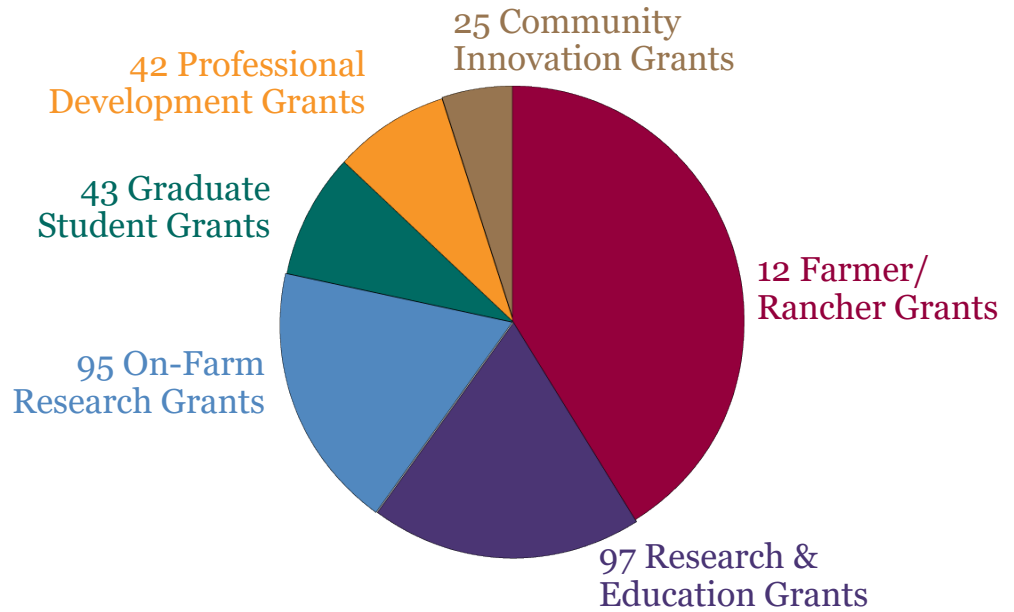
SARE shares project results by requiring grantees to conduct outreach and grower engagement; and by maintaining the SARE Learning Center—a library of practical publications, grantee-produced information products and other educational materials.



www.sare.org

SARE Grants in New York

SARE has awarded a total of **514 grants** in New York since 1988



SARE's Impact



53 percent of producers report using a new production technique after reading a SARE publication.

79 percent of producers said they improved soil quality through their SARE project.

64 percent of producers said their SARE project helped them achieve higher sales.

Contact Your SARE State Coordinator

SARE sustainable ag coordinators run state-level educational programs for Extension and other ag professionals, and many help grant applicants and recipients with planning and outreach. Visit www.nesare.org/new-york to learn more.

Violet Stone
Cornell University
(607) 255-9227
vws7@cornell.edu



SARE is funded by the USDA's National Institute of Food and Agriculture (NIFA).

For detailed information on SARE projects, go to

www.SARE.org

Appendix J. Sample Right to Farm Law

Section 1. Definitions.

- (a) Agricultural land shall mean all that real property within the boundaries of _____, in Herkimer County currently used for agricultural operations or upon which agricultural operations may in the future be established.
- (b) Agricultural Operation shall be defined as per Section 301 (11) of the State Agriculture and Markets Law and includes.

Section 2. Purpose and Intent

- (a) It is the declared policy of this _____ to enhance and encourage agricultural operations within the _____. It is the further intent of this _____ to provide to the residents proper notification of the _____ recognition and support of agriculture through this law.
- (b) It is the purpose and intent of this section to reduce the loss to the _____ of its agricultural resources by clarifying the circumstances under which agricultural operations may be considered a nuisance.
- (c) An additional purpose of this law is to promote a good neighbor policy by advising purchasers and users of property adjacent to or near agricultural operations of the inherent potential problems associated with such purchase or residence. Such concerns may include, but are not limited to, the noises, odors, dust, chemicals, smoke, and hours of operation that may accompany agricultural operations. It is intended that through mandatory disclosures, purchasers and users will better understand the impact of living near agricultural operations and be prepared to accept attendant conditions as the natural result of living in or near rural areas.

Section 3. Right-to-Farm Declaration

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

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

1. Reasonable and necessary to the farm operation;

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

Section 4. Disclosure and Notification

The _____ requires land holders or their agents to comply with Section 10 of Article 25-AA of the State Agriculture and Markets Law and provide notice to prospective purchasers and occupants as follows: “It is the policy of this state and community to conserve, protect and encourage the development and improvement of agricultural land for the production of food, and other products and also for its natural and ecological value. This notice is to inform prospective residents that the property they are about to acquire lies wholly or partially within an agricultural district and that farming activities occur within the district. Such farming activities may include, but not be limited to, activities that cause noise, dust, and odors.” This notice shall be provided to prospective purchasers of property within an agricultural district or on property with boundaries within 500 feet of a farm operation located in an agricultural district. The seller or seller’s agent shall include a copy of this notice as an addendum to the purchase and sale contract at the time an offer to purchase is made.

Section 5. Resolution of Disputes

- (a) Should any controversy arise regarding any inconveniences or discomforts occasioned by agricultural operations which cannot be settled by direct negotiation between the parties involved, either party may submit the controversy to a dispute resolution committee as set forth below in an attempt to resolve the matter prior to the filing of any court action and prior to a request for a determination by the Commissioner of Agriculture and Markets about whether the practice in question is sound pursuant to Section 308 of Article 25-AA of the State Agriculture and Markets Law.
- (b) Any controversy between parties may be submitted to a grievance committee whose decision shall be advisory only, within 30 days of the date of the occurrence of the particular activity giving rise to the controversy or of the date a party became aware of the occurrence.
- (c) The committee shall be composed of three members selected from the community including one representative from the farm community, one person from Town government, and one person mutually agreed upon by both parties involved in the dispute.
- (d) The effectiveness of the committee as a forum for the resolution of disputes is dependent upon full discussion and complete presentation of all pertinent facts concerning the dispute in order to

eliminate any misunderstandings. The parties are encouraged to cooperate in the exchange of pertinent information concerning the controversy.

- (e) The controversy shall be presented to the committee by written request of one of the parties within the time specified. Thereafter, the committee may investigate the facts of the controversy but must, within 25 days, hold a meeting to consider the merit of the matter, and within 10 days of the meeting render a decision in writing to the parties. At the time of the meeting, both parties shall have an opportunity to present what each considers to be pertinent facts.

Section 6. Separability.

If any section, subsection, sentence, clause or phrase of this law is for any reason held to be invalid or unconstitutional by the decision of a court or competent jurisdiction, it shall not affect the remaining portions of this ordinance.

Section 7. Effective Date.

This local law shall be effective immediately upon filing with the New York Secretary of State.