

Section 10 – Appendices



Appendix 1. Terminology

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

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

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

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

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

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

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

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

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

Appendix 2. Profile of the Agricultural Economy in Dutchess County

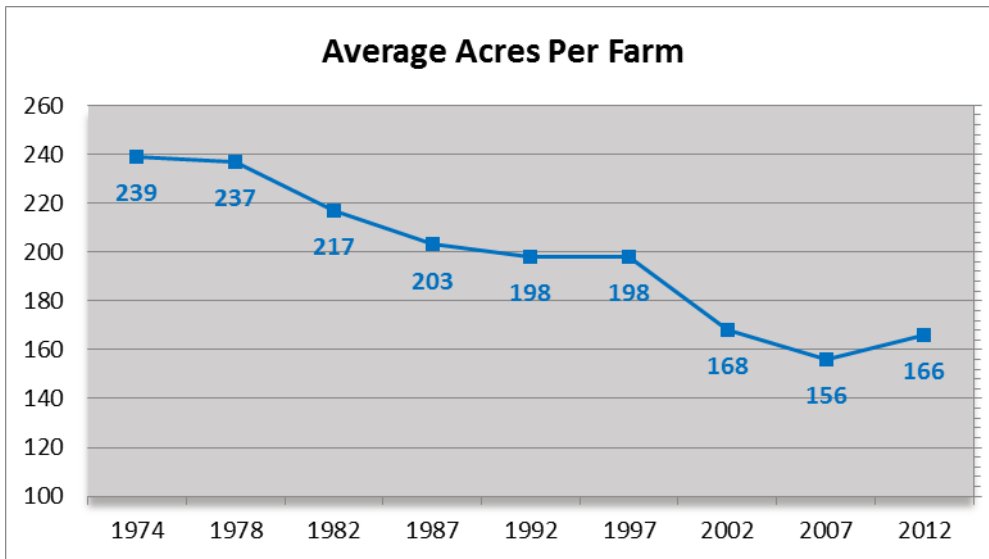
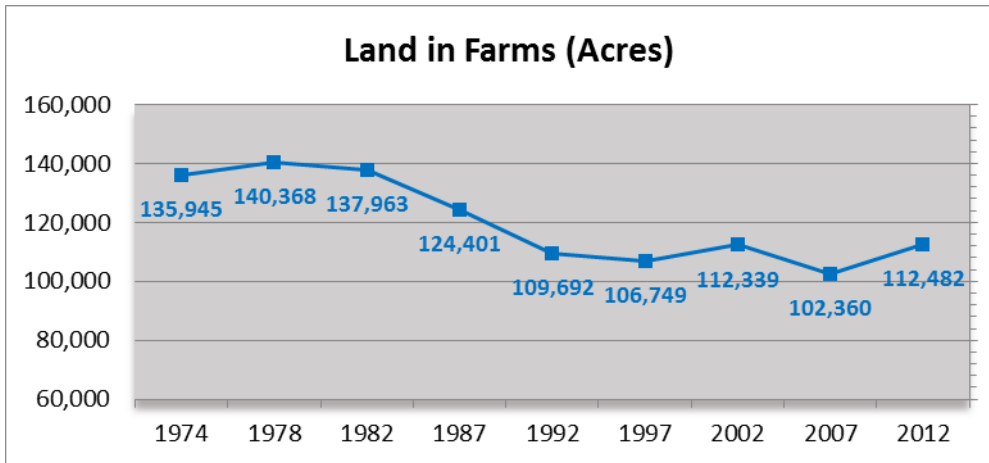
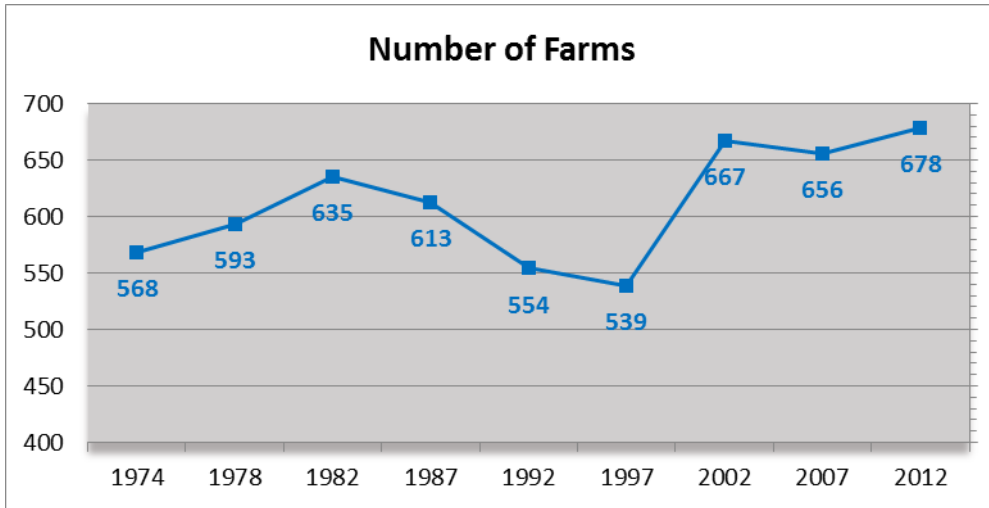
Several sources of data have been used to develop this profile of the agricultural economy. The U.S. Census of Agriculture is a good source of statistical information for understanding and evaluating the agriculture sector countywide and its important economic and other quantitative characteristics,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

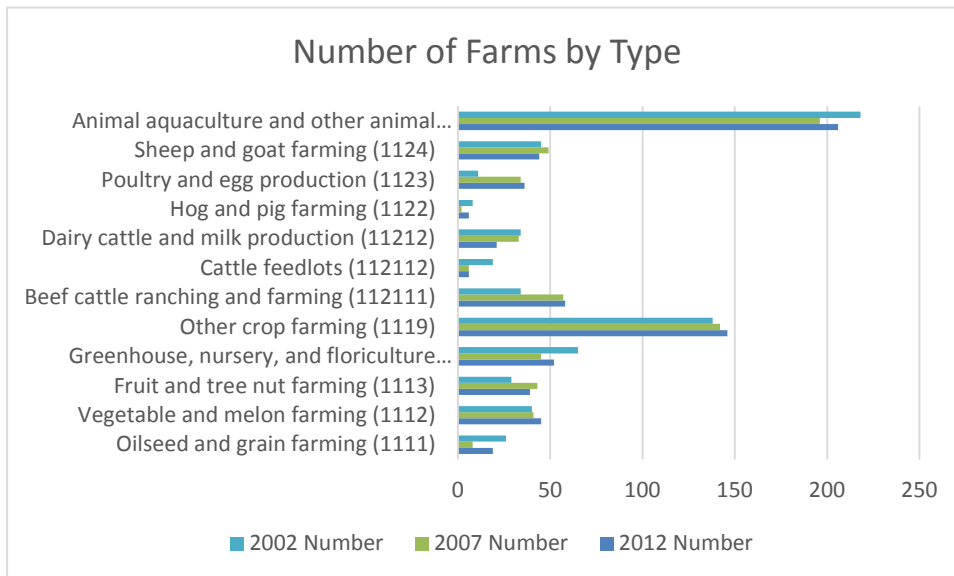
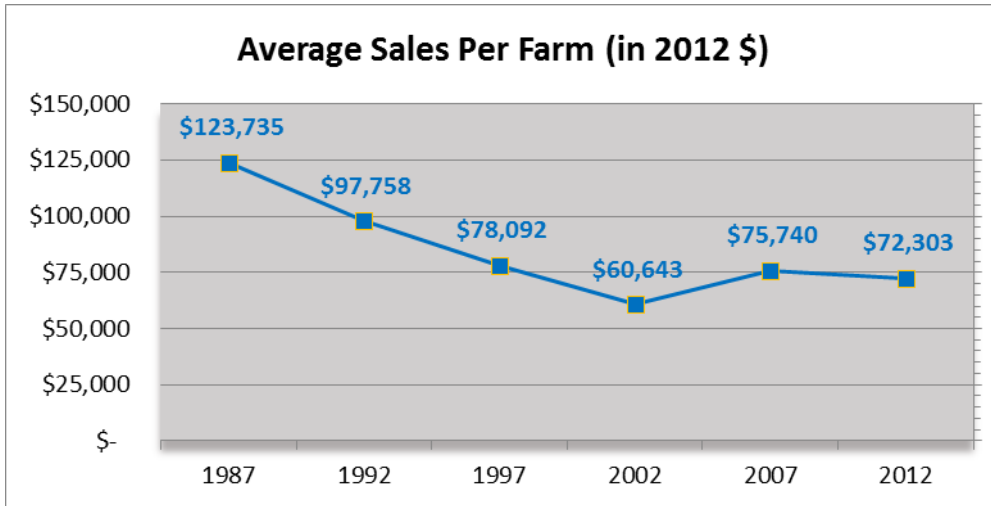
Table 1 - Dutchess County Agriculture Trends

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

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

**Inflation Adjusted in Constant 2012 dollars using US CPI.*





Important County-wide findings from this data are that:

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

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

Market Sales and Agricultural Structure

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

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

Table 2 - Agricultural Product Sales in Millions of Dollars

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

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

**Includes nursery and greenhouse products*

***And their products*

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

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

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

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

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

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

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

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

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

Table 5 - 2012 Dutchess County Product Rankings

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

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

* Sales information not published for cattle/caves, milk/dairy products from cows, hogs/pigs and aquaculture, which total to All Other Products.

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

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

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

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

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

Farm Size	Number of Farms	Percent of Farms
Less than \$1,000	171	25.2%
\$1,000 - \$9,999	174	25.6%
Total under \$10G	345	50.8%
\$10,000 - \$49,999	161	23.7%
\$50,000- \$99,999	59	8.7%
Total under \$100G	565	83.3%
\$100,000- \$249,999	66	9.7%
Over \$250,000	47	6.9%
Total	678	100.0%

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

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

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

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

Sources of Market Sales

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

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

Table 7 - Dutchess County Agricultural Sales- \$millions

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

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

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

Table 8 - Sources of Farm Income Other Than Product Sales

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

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

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

Farm Production Expenses and Income

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

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

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

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

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

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

Table 9 - Dutchess County All Farms Production Expenses -2012

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

Source: 2012 Census of Agriculture, NYS Report.

*Covers custom work and hauling, cash rent for land, buildings and grazing fees, rent & lease expense for machinery, equipment & vehicles and interest expense. These items are reported separately in the Census.

** Includes animal health costs, storage & warehousing, marketing & ginning expenses, and insurance.

Characteristics of Farm Operators and Labor

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

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

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

Tenure, Acreage and legal Status

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

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

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

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

Hired Labor

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

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

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

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

Market Value Agricultural Land

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

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

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

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

Source: 2012 Census of Agriculture, NYS Report.

Comparing Agriculture in Dutchess County with other Hudson Valley Counties

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

Table 12 - Agriculture Product Sales - 2012

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

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

*Includes nurseries and greenhouses

**And their products

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

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

Table 13 - Comparative Profitability Agriculture Sector Profitability -2012

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

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

*As measured by cash farm income **For farms with net cash gain

*** For farms with net cash loss

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

Table 14 - Farms with non-primary farm occupations

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

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

Agriculture and the Chain Link to the Overall County Economy

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

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

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

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

Sources: *2012 Census of Agriculture, NY State Report.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Appendix 3. Outline of the Planning process

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

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

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

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

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

Appendix 4. Farmer and Public Input

Kick Off Meeting

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

What are the issues facing agriculture in Dutchess County?

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

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

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

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

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

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

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

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

Survey Results

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

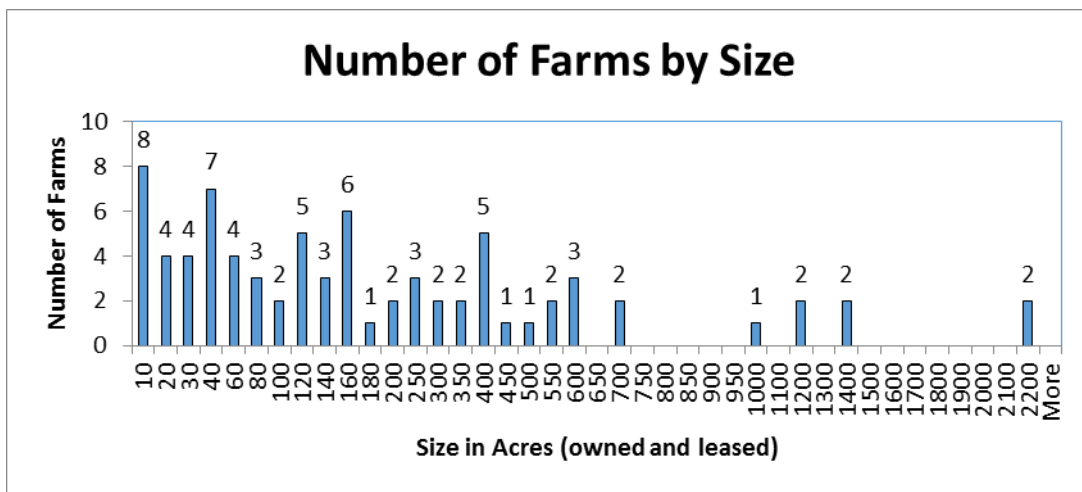
Overall, there was a positive tone to the responses from all three groups. Farmers generally stated they intend to continue farming into the future. A shortage of labor and lack of processing facilities were two needs often cited in the farmers’ responses, as well as a glut of farmers’ markets. Public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

Summaries of the results of all three surveys follow:

Farm Operators Survey

Summary - 77 responses

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



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

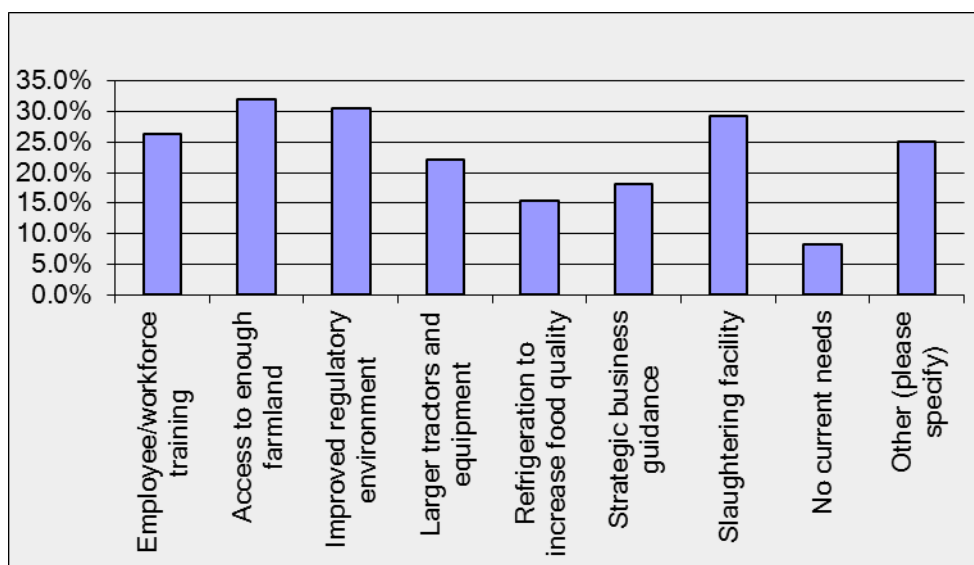
- The greatest issues facing farmers in your town:

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

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

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

- Business needs in order to grow the business:



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

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

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

Public Survey

Summary - 230 responses

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

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

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

Municipal Officials Survey

Summary - 35 responses

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

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

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

Interviews

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

The following interviews were conducted:

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

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

Appendix 5. Review of Planning and Zoning

Highlights of Zoning and Comprehensive Plan Review

Why Review Zoning and Plans?

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

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

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

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

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

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

The following Towns were included in the review:

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

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

Farm-Friendly Criteria

Comprehensive Plans

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

Zoning Law

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

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

Summary Comprehensive Plan Review

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

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

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

Summary of Zoning Review

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

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

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

Matrix Used for Review of Dutchess County Comprehensive Plans and Land Use Regulations

How to determine if a plan or regulation is “farm-friendly”

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

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

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

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

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

Appendix 6. Agricultural Priority Area Identification Method

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

Identification of Farms and Farmland

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

The Analysis Process

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

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

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

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

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

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

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

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

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

FACTORS AFFECTING AGRICULTURAL VIABILITY

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

CONTRIBUTION OF SOILS TO AGRICULTURAL ECONOMY

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

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

Analysis Steps

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

CONSEQUENCES OF CONVERSION

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

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

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

CONVERSION PRESSURE

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

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

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

OPEN SPACE VALUE

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

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

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

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

LONG TERM VIABILITY

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

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

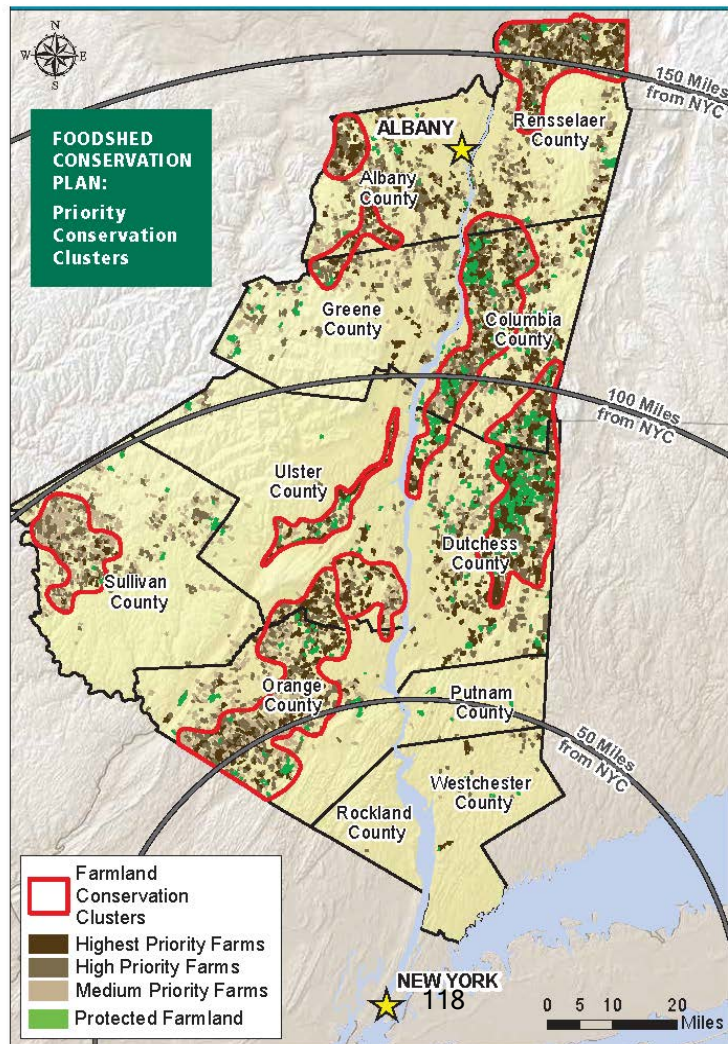
Farm Unit’s Contribution to the Agricultural Economy is a measure of profit from and investment in a farm operation, and was compiled as part of the Core Agricultural Areas database.

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

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

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

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



Appendix 8. Land Use, Regulatory and Other Resources

Model Right To Farm Law

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

Section 1. Legislative Intent and Purpose

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

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

Section 2. Definitions

1. "Farmland" shall mean land used in agricultural production, as defined in subdivision four of section 301 of Article 25AA of the State Agriculture and Markets Law.
2. "Farmer" shall mean any person, organization, entity, association, partnership, limited liability company, or corporation engaged in the business of agriculture, whether for profit or otherwise, including the cultivation of land, the raising of crops, or the raising of livestock.
3. "Agricultural products" shall mean those products as defined in section 301(2) of Article 25AA of the State Agriculture and Markets Law, including but not limited to:
 - a. Field crops, including corn, wheat, rye, barley, hay, potatoes and dry beans.
 - b. Fruits, including apples, peaches, grapes, cherries and berries.
 - c. Vegetables, including tomatoes, snap beans, cabbage, carrots, beets and onions.
 - d. Horticultural specialties, including nursery stock, ornamental shrubs, ornamental trees and flowers.
 - e. Livestock and livestock products, including cattle, sheep, hogs, goats, horses, poultry, llamas, ratites, such as ostriches, emus, rheas and kiwis, farmed deer, farmed buffalo, fur bearing animals, milk and milk products, eggs, furs, and poultry products.
 - f. Maple sap and sugar products.
 - g. Christmas trees derived from a managed Christmas tree operation whether dug for transplanting or cut from the stump.

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

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

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

Section 3. Right-to-Farm Declaration

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

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

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

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

Section 4. Notification of Real Estate Buyers

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

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

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

Section 5. Resolution of Disputes

1. Should any controversy arise regarding any inconveniences or discomfort occasioned by agricultural operations which cannot be settled by direct negotiation between the parties involved, either party may submit the controversy to a dispute resolution committee as set forth below in an attempt to resolve the matter prior to the filing of any court action and prior to a request for a determination by the Commission or Agriculture and Markets about whether the practice in question is sound pursuant to Section 308 of Article 25AA of the State Agriculture and Markets Law.
2. Any controversy between the parties shall be submitted to the committee within thirty (30) days of the last date of occurrence of the particular activity giving rise to the controversy or the date the party became aware of the occurrence.
3. The committee shall be composed of three (3) members from the Town selected by the Town Board, as the need arises, including one representative from the farm community, one person from Town government and one person mutually agreed upon by both parties involved in the dispute.
4. The effectiveness of the committee as a forum for the resolution of disputes is dependent upon full discussion and complete presentation of all pertinent facts concerning the dispute in order to eliminate any misunderstandings. The parties are encouraged to cooperate in the exchange of pertinent information concerning the controversy.
5. The controversy shall be presented to the committee by written request of one of the parties within the time limits specified. Therefore after, the committee may investigate the facts of the controversy but must, within twenty-five (25) days, hold a meeting at a mutually agreed place and time to consider the merits of the matter and within five (5) days of the meeting render a written decision to the parties. At the time of the meeting, both parties shall have an opportunity to present what each consider to be pertinent facts. No party bringing a complaint to the committee for settlement or resolution may be represented by counsel unless the opposing party is also represented by counsel. The time limits provided in this subsection for action by the committee may be extended upon the written stipulation of all parties in the dispute.
6. Any reasonable costs associated with the function of the committee process shall be borne by the participants.

Section 6. Severability Clause

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

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

Section 7. Precedence

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

Section 8. Effective Date

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

Model Disclosure Notice

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

Model Agricultural Data Statement

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

1. Name and Address of Applicant _____

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

Special Use Permit Site Plan Approval Use Variance Subdivision approval

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

4. Is this parcel within an Agricultural District? Yes No

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

6. Is this parcel actively farmed? Yes No

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

A. Name: _____
 Address and Telephone #: _____

 Type of Farm: _____

 Is this parcel actively farmed? Yes No

B. Name: _____

 Address and Telephone #: _____

 Type of Farm: _____

 Is this parcel actively farmed? Yes No

C. Name: _____

 Address and Telephone #: _____

 Type of Farm: _____

 Is this parcel actively farmed? Yes No

D. Name: _____

 Address and Telephone #: _____

 Type of Farm: _____

 Is this parcel actively farmed? Yes No

8. Signature of Applicant: _____

9. Reviewed by: _____

 Date: _____

Model Scope of Work of Local Agriculture Committee

Purposes

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

Committee; Personnel; Appointment; Organization.

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

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

Committee Assistance and Funding.

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

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

Responsibilities of Committee

The responsibilities of the committee shall be as follows:

1. To recommend methods, review proposals, and develop proposals and strategies for the implementation of the agricultural goals of the Town of _____, and report their findings to the Town Board. This includes, but is not limited to communication with local farmers, interact with other government agencies, facilitate local presentation of educational programs, to encourage and assist applications to farmland preservation programs, to encourage appropriate farmland protection activities, to study and comment on government proposals that may have an impact on local farms and to write and administer grant applications when approved by the Town Board.
2. To, from time to time, work with the Town to amend and update local plans and laws as needed to reflect the needs of agriculture and refer such updates and amendments to the Town Board.
3. To identify methods whereby the Town Board, County or State governments can encourage existing farmers to continue in active agricultural operation.
4. To, when requested by the Town Board or other agencies engaged in an environmental review of proposed private or public development projects and/or infrastructure projects, provide input regarding the impacts on agriculture of such projects.
5. To recommend to the Town Board, Town Planning Board and/or other agencies techniques that will help preserve large, contiguous and economically viable tracts of agricultural land.
6. To recommend to the Town Board reasonable and desirable changes to this listing of responsibilities or to accomplish any other tasks referred to it by the Town Board or other local agencies having to do with agricultural related activities.

Model Modified Site Plan Review Law

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

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

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

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

Site Plan Process

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

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

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

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

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

Appendix 9. Agricultural Assessment Program and Agricultural District Program

What are the differences?

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

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

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

The Agricultural Assessment Program establishes a ceiling value for taxable assessments on eligible farmland. The local assessor is provided with State Certified ceiling values every year. Any assessed value which exceeds the agricultural assessment is exempt from Real Property taxation. Landowners must file an application annually, usually by March 1, with the local assessor to be considered for the Agricultural Assessment Program. Failure to file the application on time will result in denial of the exemption.

If land that benefited from an Agricultural

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

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

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

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

The Agricultural District Law protects farm operations¹ within an agricultural district from the enactment and administration of unreasonably restrictive local regulations unless it can be shown that public health or safety is threatened. Under Agriculture and Markets Law § 308, known as the 'Right to Farm' law, if a question or dispute arises regarding farm practices that may threaten public health or safety, an opinion can be requested of the Commissioner of Agriculture and Markets as to whether or not sound agricultural practices are being followed.

Every eight years a full review of the Agricultural Districts is conducted pursuant to Agriculture & Markets Law § 303 a; the last review was in 2008. Agriculture & Markets Law § 303 b opens an annual window of opportunity for certain parcels to be added to the district. An application for annual enrollment must be filed with the Dutchess County Soil and Water Conservation District between April 15 and May 14 to be considered for inclusion in an agricultural district. If approved, the land remains in the agricultural district for the remainder of the eight year period.



¹In most cases, to be considered a 'farm operation' qualification for agricultural value assessment must be met.

Differences at a Glance

Agricultural Assessment Program

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

Agricultural District Program

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

For Further information:

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

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

Appendix 10. Model Agricultural Coordinator (from Jefferson County)

General Statement of Duties

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

Distinguishing Features of the Position

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

Typical Duties Include but are not limited to:

Identifying Agricultural Needs and Developing Solutions

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

Agricultural Financing

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

Agricultural Marketing

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

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

Appendix 11. Inventory of Resources

County Agencies and Organizations

Dutchess County Agricultural and Farmland Protection Board

County Agricultural District Review & Mapping

Dutchess County Department of Planning and Development

Development of the County's agricultural and farmland protection plan

NYS GML 239 reviews

Agricultural and Farmland Protection Board

Partnership for Manageable Growth

Hudson River Valley Greenway Compact/Greenway Guides

Dutchess County Tourism

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

Dutchess Putnam Westchester Farm Bureau

Cornell Cooperative Extension Dutchess County

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

Small Farms Program

Farm to School Program

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

Dutchess County Soil and Water Conservation District

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

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

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

Dutchess Land Conservancy

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

[Farm Credit East](#)

Dairy and Winery Benchmarks

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

Financial Partner Magazine

GenerationNext

New York State Farm Worker Housing Loan Program.

Regular office operations.

[Farm Service Agency](#)

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

[Dutchess County Real Property Tax Service Agency](#)

[Dutchess County Sheep and Wool Growers Association](#)

[Northern Dutchess Alliance](#)

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

Regional Agencies and Organizations

[Hudson Valley Agribusiness Development Corporation](#)

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

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

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

[American Farmland Trust, New York Office](#)

[Scenic Hudson](#)

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

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

[Glynwood Center – Hudson Valley Farm Business Incubator](#)

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

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

[Hudson River Valley Greenway](#)

[CRREO – Center for Research, Regional Education and Outreach](#)

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

[Hudson Valley Regional Fruit Program](#)

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

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

[Heroic Food Farm](#)

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

[Hudson Valley Fresh](#)

[Open Space Institute \(OSI\)](#)

[Local Economies Project \(LEP\)](#)

[New England Small Farm Institute](#)

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

[Northeast Beginning Farmers Project](#)

[Northeast Center for Food Entrepreneurship](#)

New York State Agencies and Programs

[NYS Department of Agriculture and Markets](#)

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

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

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

[Pride of New York Program](#)

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

Additional funding opportunities announced periodically.

[New York State Energy Research and Development Authority \(NYSERDA\)](#)

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

Programs and funding opportunities for the agricultural sector -

<http://www.nysERDA.ny.gov/Energy-Efficiency-and-Renewable-Programs/Commercial-and-Industrial/Sectors/Agriculture.aspx>

[Farmers Market Federation of New York](#)

[New York Ag Connection](#)

[New York Farm Bureau](#)

[New York FarmLink](#)

[New York Farmnet](#)

[New York Farm Viability Institute](#)

[New York Sustainable Agriculture Working Group](#)

[Small Scale Food Processors Association of New York](#)

Federal Government Agencies and National Programs

[USDA Agricultural Marketing Service](#)

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

[USDA Farm Service Agency](#)

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

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

[USDA Natural Resources Conservation Service](#)

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

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

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

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

WHIP – Wildlife Habitat Improvement Program

CRP – Conservation Reserve Program

Crep – conservation reserve enhancement program

Small watershed program

[USDA New Farmers Website](#)

[USDA Rural Development, New York Office](#)

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

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

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

[Farm Aid](#)

[Farmer Resource Network](#)

[Agricultural Marketing Resource Center](#)

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

[CADE, The Center for Agricultural Development and Entrepreneurship](#)

[Farmer Veteran Coalition](#)

[National Farm to School Network](#)

[National Good Agricultural Practices Program](#)

[National Sustainable Agriculture Information Service](#)

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

[National Young Farmers Coalition](#)

[Northeast Organic Farming Association](#)

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

[Northeast Sustainable Agriculture Research and Education](#)

Offers grants for funding relevant agricultural research projects.

[WWOOF \(World Wide Opportunities on Organic Farms\)](#)

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

Municipal Plans

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

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

[Erie County Agricultural and Farmland Protection Plan, \(Erie County Agricultural and Farmland Protection Board, 2012\)](#)

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

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

Virtual Food Hubs

[New York Marketmaker](#)

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

[Local Dirt](#)

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

[FarmersWeb](#)

An online marketplace connecting buyers with local farms and producers.

[List Your Harvest](#)

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

Publications

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

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

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

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

[Dutchess County Agricultural and Farmland Protection Board, *Dutchess County Agricultural and Farmland Protection Plan* \(Dutchess County Agricultural and Farmland Protection Board 1998\)](#)

[Dutchess County Department of Planning & Economic Development, *Greenway Guide to Saving Farmland with Development*,](#)

[Mid-Hudson Regional Sustainability Plan \(Mid-Hudson Planning Consortium, 2013\) Executive Summary](#)

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

[Glynwood, *The State of Agriculture in the Hudson Valley*, \(Glynwood, 2010\)](#)

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

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

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

[Hudson Valley Agribusiness, *Understanding Food Systems: Identifying Business Opportunities for Hudson Valley Farmers and Food Entrepreneurs*](#)

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

[The Role of Food Hubs in Local Food Marketing, \(USDA Rural Development, 2013\)](#)

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

[NYS Small Business Development Center, *Recipe for Success: Selling Food Products*](#)

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

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

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

[Onondaga County - *Municipal Reference for Agricultural Land Use Planning*, \(Cornell Cooperative Extension, 2002\)](#)

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

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

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

[Yates County Agricultural and Farmland Protection Board, Yates County Agricultural Planning Guide](#)

[Transfer of Development Rights – Local Development Technical Series, \(NYS Dept of State, 2010\)](#)