

STEUBEN COUNTY: STATE OF THE AGRICULTURAL ECONOMY

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Executive Summary

Agriculture has historically been a critical component of the economy of Steuben County. As economic conditions change and the food and agriculture industries become increasingly consolidated, small, community-based farms are finding it more difficult to compete. The purpose of this State of the Steuben County Agricultural Economy report is to benchmark—using both economic data and information gathered from interviews—all aspects of the County’s economy as it relates to agriculture. The report also highlights potential opportunities and constraints with respect to expanding the agriculture-based economy.

For the purposes of this analysis the following terms and definitions have been used:

Agriculture: defined broadly to include all agriculture related activities including farming, suppliers of farm inputs, purchasers of farm outputs, and transportation/storage of agriculture products

Farming: actual on-farm operations including growing crops and raising live-stock and found in the Agriculture, Forestry, Fishing, and Hunting industry classification

Suppliers of Inputs: establishments that supply goods or services to farms

Purchasers of Farm Products: establishments that purchase goods from farms

Transportation and Storage: establishments involved in transportation, warehousing, and storage of agricultural products

Farm-related Businesses: These include agri-tourism, crafts, and other part-time businesses that are conducted on the farm in addition to agricultural production.

Major Findings

Historically strong growth in on-farm employment.

Data¹ show that of the 40,000 jobs in Steuben County in 2013, 741 jobs (2%) were in the Agriculture (Farming), Forestry, Fishing, and Hunting sector², not including any of the inputs or value-added processors such as dairy processing. This sector showed strong growth between 2003 and 2013, increasing by 14%, compared to the flat growth experienced by the County economy overall. Farm job growth is expected to taper off into the future, with estimated growth of just 3% by 2023. This is compared to 4% growth projected for the County overall.³

Farming and agriculture related employment plays a large role in the county economy.

As shown in the table below, farming is only one piece of the overall economy and when agriculture related industries are included the role is much larger. The table below shows the total employment in

¹ The source of this data is a proprietary data source called EMSI, Int. EMSI data are compiled from several sources, including the U.S. Census Bureau and U.S. Departments of Health and Labor using specialized proprietary processes and models to estimate current statistics and predict future trends. Visit www.economicmodeling.com for additional information.

² Technically this sector is known as “Agriculture, Forestry, Fishing, and Hunting”, for purposes of this analysis the word *farming* is added to distinguish between on-farm operations and agriculture-related industries.

³ Due to different methods for reporting employment on farms, EMSI data typically does not capture all of the farm related employment. For this report, the EMSI data has been supplemented by the 2012 Agriculture Census.

each of the different points of the agriculture supply chain. In addition to the employment shown below, there is also induced employment generated as a result of the agriculture industry existing in Steuben.

Total Agriculture Related Employment		
Segment of Supply Chain	Number of Jobs	Source
Farming	1,759	2012 US Agriculture Census
Suppliers of Inputs to Farming	222	EMSI, 2013 Employment
Purchasers of Farm Goods (Manufacturing)	714	EMSI, 2013 Employment
Purchasers of Farm Goods (Wholesalers)	54	EMSI, 2013 Employment
Purchasers of Farm Goods (Retail and Restaurants)	3,262	EMSI, 2013 Employment
Agri-Tourism*	23	EMSI, 2013 Employment
Total Agriculture Employment	6,034	
Total County Employment	40,000	
Percent of County Employment From Agriculture Supply Chain	15%	

* Assumes 5% of current Accommodations industry is associated with agri-tourism. Additional research will be conducted.

The impact of farming in Steuben County is not restricted to only the jobs that currently exist in these industries. The direct employees as shown above make purchases in the local economy, which in turn creates jobs in other industries such as local government, retail goods, banking, education, insurance, etc. When considering the induced impacts of the Agriculture economy there are another approximately 500 jobs that would be lost if the farms were to cease to exist.

The majority of hired farm laborers work less than 150 days out of the year.

Data from the Census of Agriculture was used to supplement EMSI data, which is known to undercount economic activity related to farming. According to the 2012 Census of Agriculture, the number of hired laborers working on farms was 1,759, although two-thirds of these employees worked for less than 150 days out of the year.

Steuben County farm workers earn less than their statewide counterparts.

Average earnings per hired farm worker rose by 18% between 2002 and 2012, from \$7,667⁴ to \$9,068. Average earnings for County farm workers in 2012 were significantly below those of workers statewide—\$9,068 compared to \$11,989.

Half of Steuben County's land is dedicated to farming.

The 2012 Census of Agriculture reports that Steuben County has the most farming acreage of any New York county, with over 420,000 acres. In fact, 47% of the county's land area is dedicated to farming. The average farm size was 243 acres in 2012.

Most Steuben County farms are small operations, but large farms are driving growth.

Of the 1,667 farms in operation in 2012, the vast majority were small operations. Farms with sales of less than \$50,000 accounted for three-quarters of all farms. Seventy-one percent (71%) of farms hired no workers in 2012. Large operations, however, have seen the greatest increases in both acreage and sales, in both percentage and absolute terms.

⁴ Inflation-adjusted. Reported in 2012 dollars.

Overall net farm income has doubled since 2002, but many farm operations remain unprofitable.

Net cash farm income more than doubled to \$52 million in 2012, up from \$24 million⁵ in 2002. Average net income per farm also doubled, from \$16,000⁶ to \$31,000. Nonetheless, the proportion of farms with net gains stayed flat, at 42%. This is comparable to state- and national-level figures. This highlights the face that the income gains have mostly accrued to the larger operations.

Steuben County ranks among the top sellers of farm products in New York.

Over \$187 million in farm product sales were reported for Steuben County in 2012, ranking 7th in the state and accounting for 3.5% of farm sales statewide. The County saw a 25% increase since 2007, rising from its 12th place ranking. Animal product sales accounted for 57% of sales, with crop sales comprising the remainder.

Dairy continues to drive farm product sales, as well as agriculture-related manufacturing.

Milk from cows is the number one agricultural product in the County by far, accounting for 42% of all sales in 2012. Steuben County ranked 11th in the state in terms of milk production. Fluid Milk Manufacturing and Cheese Manufacturing were the largest agriculture-related manufacturing industries in terms of employment, collectively comprising 75% of agriculture-related manufacturing jobs. Kraft Foods and H.P. Hood are the major players in this industry in the County.

Cattle farming is a thriving industry, but all beef processing currently occurs outside the County.

Cattle and calf production in the County was an \$18 million industry in 2012, increasing by 34% from 2007 and making up 9% of all farm sales. Steuben County ranks fifth in the state in cattle production. Despite high cattle production, there is virtually no animal slaughtering, processing, or rendering occurring within the County.

Lower volume farm products, especially grains, have shown high sales growth.

Products with relatively low sales have shown significant growth in sales between 2007 and 2012. The increase in sales of grains, oilseeds, dry beans, and dry peas accounted for 64% of the sales growth. Corn showed the greatest sales growth in absolute terms, adding \$19 million in sales and rising from the fifth-place to the second-place product.

Wineries will continue to expand and provide jobs for the County.

In addition to attracting spending from outside the County, wineries are key employers, supporting 162 jobs in 2013. Concentrated in the northeast quadrant of the County around Keuka Lake, more than ten wineries are in operation within the County, a number that is projected to grow.

New brewery legislation offers opportunities for expansion of the beer industry.

The Cuomo administration has announced a new initiative that introduces the Small Farm Brewery License, which provides benefits to license-holders including increasing the types of retail outlets in which they can sell and allowing them to operate restaurants and hold tastings. In order to obtain a license, a brewer must source an increasing portion of its inputs from New York State. Steuben County has the opportunity to increase production and processing of barley and hops in response to the demand for state-grown inputs.

Community-driven initiatives have helped to connect local farmers and consumers.

Several initiatives are underway in Steuben County to better connect consumers to locally produced agricultural products. Some examples include farmers' markets, setting up a meat locker, community-

⁵ Inflation-adjusted. Reported in 2012 dollars.

⁶ Inflation-adjusted. Reported in 2012 dollars.

supported agriculture (CSA) programs. Cornell Cooperative Extension is active in promoting local agriculture.

Steuben County is well-positioned to capitalize on numerous opportunities within the agricultural economy.

Based on this initial research including the data collection, research, and interviews with key stakeholders in the community, the following are possible opportunities for the county's agriculture economy development strategy. Additional research into the specifics of these opportunities will be conducted.

1. Welcome Agri-Tourists - There has been significant growth in the realm of agriculture-related tourism ranging from breweries and wineries offering tours and tastings to working farms inviting visitors to work the field for a weekend. Bed and breakfast operators should work with farms, restaurants, transportation providers, and other industries to create and market unique experiences that would be attractive to the growing segment of agri-tourists. Example packages could include:
 - a. Wine: A vineyard and winery could invite tourists to come work on the vineyard for a day assisting with tying off the vines and changing the barrels. Participants would learn about how wine is made and could be sent home with a bottle.
 - b. Cooking: A farm could partner with a local restaurant or B&B to teach a class on how to use local in-season ingredients. Participants would be able to learn tricks of the trade from a chef and they would learn all about the importance of local, quality ingredients.
2. Create Connections – Find ways to make owning and operating a farm in Steuben County easier through the creation and strengthening of connections across all aspects of the economy. The New York Farm Link Program seeks to match farmers looking to retire with young farmers looking to buy a farm.
 - a. Business to Institution: Develop a system to bundle produce locally to sell to local institutions such as schools, hospitals, office complexes, etc. This would replace the use of the Sysco truck deliveries and would create economies of scale, predictability in demand, and larger purchases for all of the farmers.
 - b. Business to Resident: Create a system for direct delivery of farm products to residents beyond farmers markets. A group of farms can get together to utilize the internet to market and distribute their goods to residents using specific drop off times and locations around the county. One example of this kind of system is the Windham Farm and Food Network in Vermont.
 - c. Business to Business: There are dozens of agriculture economy industries that are not represented in Steuben County. By working with existing businesses to identify which of these missing businesses is most important to their financial viability, the county can work to attract companies to fill that need. By



bringing more ag-related industries into Steuben County, the cost of doing business for farmers can be reduced, thereby increasing the chance of long-term success and financial viability. An example of a business that does not currently exist in the county but would lower the costs for farmers is a meat processing facility. Another example is a whey processing facility to take the whey by-product from dairy producers in the county and turn it into something valuable. Here is a list of all the industries with little (less than 10 employees) or no representation in Steuben County.

Ag-Related Industries With Fewer Than 10 Employees in Steuben County (2013)				
NAICS	Description	NAICS	Description	
115310	Support Activities for Forestry	311422	Specialty Canning	
115112	Soil Preparation, Planting, and Cultivating	311423	Dried and Dehydrated Food Manufacturing	
115113	Crop Harvesting, Primarily by Machine	311512	Creamery Butter Manufacturing	
115114	Postharvest Crop Activities (except Cotton Ginning)	311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	
115111	Cotton Ginning	311520	Ice Cream and Frozen Dessert Manufacturing	
115116	Farm Management Services	311611	Animal (except Poultry) Slaughtering	
113210	Forest Nurseries and Gathering of Forest Products	311612	Meat Processed from Carcasses	
113110	Timber Tract Operations	311613	Rendering and Meat Byproduct Processing	
114210	Hunting and Trapping	311615	Poultry Processing	
114111	Finfish Fishing	311711	Seafood Canning	
114112	Shellfish Fishing	311712	Fresh and Frozen Seafood Processing	
114119	Other Marine Fishing	311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	
115112	Soil Preparation, Planting, and Cultivating	311821	Cookie and Cracker Manufacturing	
115113	Crop Harvesting, Primarily by Machine	311822	Flour Mixes and Dough Manufacturing from Purchased Flour	
115114	Postharvest Crop Activities (except Cotton Ginning)	311823	Dry Pasta Manufacturing	
115116	Farm Management Services	311830	Tortilla Manufacturing	
325311	Nitrogenous Fertilizer Manufacturing	311911	Roasted Nuts and Peanut Butter Manufacturing	
325312	Phosphatic Fertilizer Manufacturing	311919	Other Snack Food Manufacturing	
325314	Fertilizer (Mixing Only) Manufacturing	311920	Coffee and Tea Manufacturing	
325320	Pesticide and Other Agricultural Chemical Manufacturing	311930	Flavoring Syrup and Concentrate Manufacturing	
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing	
424520	Livestock Merchant Wholesalers	311942	Spice and Extract Manufacturing	
424590	Other Farm Product Raw Material Merchant Wholesalers	311991	Perishable Prepared Food Manufacturing	
311111	Dog and Cat Food Manufacturing	311999	All Other Miscellaneous Food Manufacturing	
311119	Other Animal Food Manufacturing	312111	Soft Drink Manufacturing	
311211	Flour Milling	312112	Bottled Water Manufacturing	
311212	Rice Milling	312113	Ice Manufacturing	
311213	Malt Manufacturing	312120	Breweries	
311221	Wet Corn Milling	312140	Distilleries	
311222	Soybean Processing	424410	General Line Grocery Merchant Wholesalers	
311223	Other Oilseed Processing	424420	Packaged Frozen Food Merchant Wholesalers	
311225	Fats and Oils Refining and Blending	424480	Fresh Fruit and Vegetable Merchant Wholesalers	
311230	Breakfast Cereal Manufacturing	424490	Other Grocery and Related Products Merchant Wholesalers	
311311	Sugarcane Mills	424510	Grain and Field Bean Merchant Wholesalers	
311312	Cane Sugar Refining	424810	Beer and Ale Merchant Wholesalers	
311313	Beet Sugar Manufacturing	424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers	
311320	Chocolate and Confectionery Manufacturing from Cacao Beans	424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	
311330	Confectionery Manufacturing from Purchased Chocolate	445210	Meat Markets	
311340	Nonchocolate Confectionery Manufacturing	445230	Fruit and Vegetable Markets	
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	722330	Mobile Food Services	
311412	Frozen Specialty Food Manufacturing	484122	General Freight Trucking, Long-Distance, Less Than Truckload	
311421	Fruit and Vegetable Canning	493120	Refrigerated Warehousing and Storage	

Source: EMSI

3. Build Name Recognition: Having name recognition associated with quality can allow producers to charge higher prices and make a higher profit on their goods. Steuben County producers should work together to define and build a "Steuben Brand" and ensure that it is associated with high quality, premium goods. There should be a process in place to certify products using the brand to make sure they fit into the larger context of Steuben agriculture.
4. Celebrate Agriculture: Construct a facility to serve as a destination for a variety of agriculture related events throughout the year. Steuben County could host year round livestock and equine shows. Equine shows could include riding, dressage, and other competitions. Steuben County is

a leader in the state in terms of equine inventory and sales -- a facility to host events could help grow their recognition.

5. Cheers to Steuben: Growth in the beer, wine, and spirit industry creates numerous opportunities for Steuben County. With the changes in the NYS legislation regarding the “Made in New York” labeling process, Steuben County can fill the demand for both the inputs and for the production and manufacturing. Examples of potential opportunities for Steuben include:
 - a. Beer: In order for brewers to meet the requirements to be labeled as “Made in New York” there will be increased demand for the production and processing of hops and barley. Additionally, with the growth in microbreweries and craft beers in New York State and throughout the United States there is also a demand for increased bottling facilities.
 - b. Vodka: Steuben County’s agricultural economy is well situated to transition into vodka distilling. As interest has shifted towards craft beers a similar situation is occurring in the liquor industry, as smaller organizations are breaking into the business with some success. There is increased demand for unique and specialized liquors and small operations are opening up their facilities for tours and tastings in a way similar to the brewery and winery model. Vodka is particularly well-suited for Steuben County thanks to its significant potato production.
6. Strengthen Networks: Establish an informal network of individuals and organizations within the agricultural economy to encourage the creation of partnerships and cooperation. The network should include not only farmers but organizations throughout the entire agricultural economy including suppliers and buyers. The network could be designed to meet once a quarter throughout the county, discuss issues they are facing (workforce, financing, climate change, policy issues, etc.), identify opportunities for collaboration (farms and restaurants, farms and value-added producers, agri-tourism opportunities, farms and fertilizer producers, etc.), and assist when any major concerns or issues begin to face members of the network (financing needs, land sale considerations, etc.).

Economic Base Analysis

In 2014, there were 40,000 jobs in Steuben County. The 2-digit NAICS sector with the most employment was Government with 8,110 jobs, followed by Health Care and Social Assistance with 5,556 jobs, and Manufacturing with 5,209 jobs. While Manufacturing was the sector with the third highest employment count overall, it also lost the greatest number of jobs between 2003 and 2013 (-873 jobs). Government also lost a large number of jobs (-537 jobs) over the period. The fact that three of the top four sectors lost employment suggests a shift the County's economic base.

The industries with the highest job growth in absolute terms between 2003 and 2013 were Professional, Scientific, and Technical Services (+652 jobs) and Administrative and Support and Waste Management and Remediation Services (+616 jobs). Overall, the County lost 235 jobs, a decrease of 1%.

A look at national location quotients provides insight into the concentration of industry sectors relative to the U.S. as a whole. A location quotient (LQ) measures an industry's level of concentration within a particular location. It is the share of countywide employment in a given sector relative to total countywide employment, divided by the share of national employment in that sector relative to total national employment. An LQ greater than 1 indicates a higher than average level of industry concentration relative to the nation as a whole. The sector with the highest location quotient in Steuben County was Management of Companies and Enterprises, with an LQ of 1.78, followed by Manufacturing at 1.75. Agriculture (Farming), Forestry, Fishing, and Hunting was third, with an LQ of 1.49.

NAICS Code	Description	2003 Jobs	2013 Jobs	2023 Jobs (projected)	Change 2003–2013	% Change 2003–2013	Projected Change 2013–2023	Projected % Change 2013–2023	2013 National Location Quotient
90	Government	8,647	8,110	7,948	(537)	(6%)	(162)	(2%)	1.26
62	Health Care and Social Assistance	5,351	5,556	6,299	205	4%	743	13%	1.13
31	Manufacturing	6,382	5,509	4,955	(873)	(14%)	(554)	(10%)	1.70
44	Retail Trade	4,562	4,402	4,515	(160)	(4%)	113	3%	1.06
54	Professional, Scientific, and Technical Services	2,594	3,246	3,906	652	25%	660	20%	1.31
72	Accommodation and Food Services	2,231	2,510	2,639	279	13%	129	5%	0.77
56	Administrative and Support and Waste Management and Remediation Services	1,503	2,119	2,498	616	41%	379	18%	0.87
81	Other Services (except Public Administration)	1,903	1,668	1,831	(235)	(12%)	163	10%	0.85
52	Finance and Insurance	1,137	1,076	1,013	(61)	(5%)	(63)	(6%)	0.66
23	Construction	1,297	1,061	1,094	(236)	(18%)	33	3%	0.52
55	Management of Companies and Enterprises	1,095	981	874	(114)	(10%)	(107)	(11%)	1.78
48	Transportation and Warehousing	621	853	1,054	232	37%	201	24%	0.66
11	Agriculture, Forestry, Fishing and Hunting	649	741	763	92	14%	22	3%	1.49
71	Arts, Entertainment, and Recreation	408	541	763	133	33%	222	41%	0.83
42	Wholesale Trade	409	439	536	30	7%	97	22%	0.28
51	Information	491	366	315	(125)	(25%)	(51)	(14%)	0.49
53	Real Estate and Rental and Leasing	338	278	304	(60)	(18%)	26	9%	0.42
61	Educational Services (Private)	265	220	180	(45)	(17%)	(40)	(18%)	0.22
22	Utilities	213	183	179	(30)	(14%)	(4)	(2%)	1.25
21	Mining, Quarrying, and Oil and Gas Extraction	71	106	94	35	49%	(12)	(11%)	0.48
99	Unclassified Industry	70	34	13	(36)	(51%)	(21)	(62%)	0.65
	Total	40,235	40,000	41,774	(235)	(1%)	1,774	4%	

Source: EMSI

Agriculture, Forestry, Fishing, and Hunting

While EMSI⁷ reports that Agriculture, Forestry, Fishing, and Hunting accounts for 741 jobs in Steuben County—just 2% of all employment—the sector experienced healthy growth between 2004 and 2014, outpacing the County as a whole. Over that period, jobs expanded by 14% (+92 jobs). It ranked sixth among all sectors in terms of percentage growth and seventh in absolute growth. Growth in this sector outperformed the state, which showed growth close to 0%, and the nation, which experienced a decline of 3%. Average earnings for this sector in Steuben County for 2014 were \$24,990, compared to \$30,922 in New York and \$31,769 nationally.

Further analysis of Agriculture (specifically farming), Forestry, Fishing, and Hunting at the 3-digit level shows how employment is distributed between sub-industries. Animal Production was the 3-digit sector with the most jobs (429 jobs), followed by Crop Production (196 jobs).⁸ Together, these sectors accounted for 84% of all sector jobs. Support Activities for Agriculture and Forestry had the third highest job count (70 jobs). In addition to having the greatest number of jobs, Animal Production showed the highest increase in both absolute and percentage terms between 2003 and 2013, adding 164 jobs (+57%). It also had the highest location quotient by far, 3.77. Although Crop Production comprised a large share of farm jobs (about 26%), it showed a decline (-64 jobs) and had a location quotient below 1. While Forestry and Logging had only 43 jobs—and experienced a decline in employment between 2003 and 2013—it had a relatively high location quotient of 2.01. Employment in Fishing, Hunting, and Trapping was insignificant.

Both Animal and Crop Production are expected to show modest increases in employment over the next 10 years, with projected increases of 9% and 2%, respectively. Employment in Support Activities is expected to decline slightly, with Forestry and Logging jobs continuing to decline into the future.

⁷ It is important to note that EMSI typically undercounts employment in the Agriculture industry due to the differences in reporting standards for farms versus other types of industries. The EMSI agriculture employment data is provided as background as to major trends but the analysis relies more heavily on the more accurate 2012 US Census of Agriculture.

⁸ Note that there is a large poultry operation in the County that is not being picked up by either the EMSI data or the 2012 US Census of Agriculture. Additional research will be conducted into this industry.

Steuben County Agriculture Employment, 6-digit NAICS									
NAICS Code	Description	2003 Jobs	2013 Jobs	2023 Jobs (projected)	Change 2003–2013	% Change 2003–2013	Projected Change 2013–2023	Projected % Change 2013–2023	2013 National Location Quotient
112	Animal Production*	273	429	468	156	57%	39	9%	3.77
111	Crop Production*	260	196	200	(64)	(25%)	4	2%	0.91
115	Support Activities for Agriculture and Forestry	57	70	65	13	23%	(5)	(7%)	0.52
115115	Farm Labor Contractors and Crew Leaders	37	47	45	10	27%	(2)	(4%)	0.62
115210	Support Activities for Animal Production	<10	12	11	--	--	(1)	(8%)	1.09
115310	Support Activities for Forestry	<10	<10	<10	--	--	--	--	--
115112	Soil Preparation, Planting, and Cultivating	<10	<10	<10	--	--	--	--	--
115113	Crop Harvesting, Primarily by Machine	0	<10	<10	--	--	--	--	--
115114	Postharvest Crop Activities (except Cotton Ginning)	0	<10	<10	--	--	--	--	--
115111	Cotton Ginning	0	0	0	--	--	--	--	--
115116	Farm Management Services	0	0	0	--	--	--	--	--
113	Forestry and Logging	57	43	27	(14)	(25%)	(16)	(37%)	2.01
113310	Logging	56	43	27	(13)	(23%)	(16)	(37%)	2.20
113210	Forest Nurseries and Gathering of Forest Products	0	0	0	--	--	--	--	--
113110	Timber Tract Operations	<10	0	0	--	--	--	--	--
114	Fishing, Hunting and Trapping	<10	<10	<10	--	--	--	--	--
114210	Hunting and Trapping	<10	<10	<10	--	--	--	--	--
114111	Finfish Fishing	0	<10	<10	--	--	--	--	--
114112	Shellfish Fishing	0	0	0	--	--	--	--	--
114119	Other Marine Fishing	0	0	0	--	--	--	--	--
11	Total	649	741	763	92	14%	22	3%	1.49

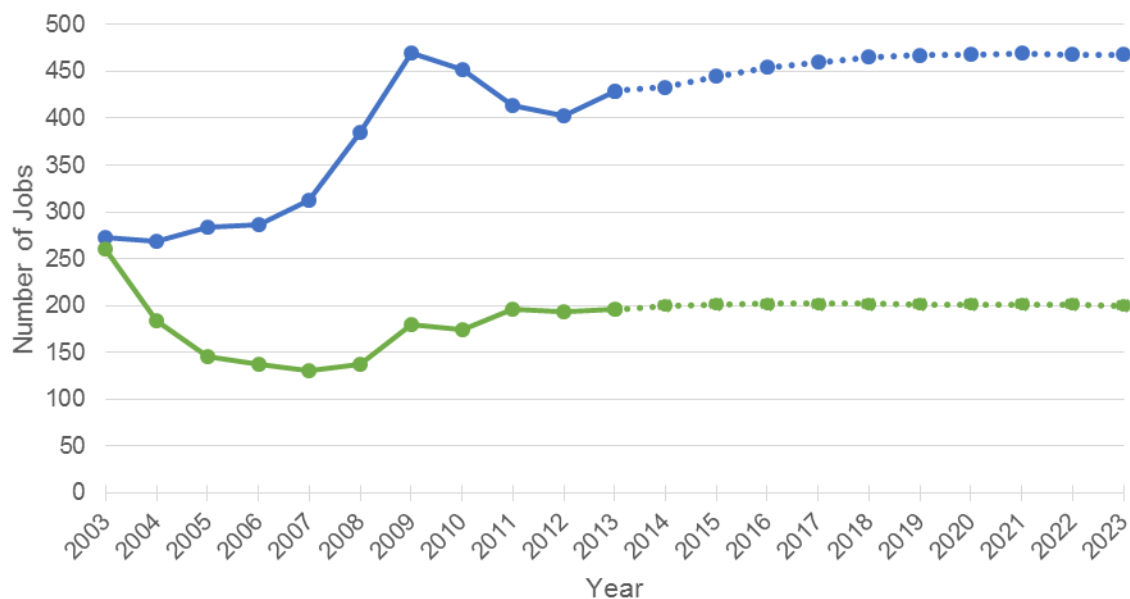
*EMSI does not report Animal Production and Crop Production Employment below the 3-digit level.

Source: EMSI

Farm Employment

The following chart shows past and projected future employment for Animal Production and Crop Production between 2003 and 2023. Data are from EMSI. Animal Production jobs grew rapidly beginning in 2007 and peaked in 2009. Since then, they have declined slightly, but are projected to slowly increase through 2023, eventually reaching 2009 levels. Crop Production jobs declined sharply from 2003 to 2005, and have since risen gradually. In the future, these jobs are expected to remain flat. It is interesting to note that in 2003 the numbers of Animal and Crop Production jobs were almost equal, while in 2013, Animal Production jobs are more than double Crop Production jobs.

Animal Production and Crop Production Employment,
Steuben County, 2003–2023



Source: EMSI

—●— Animal Production —●— Crop Production

The table below shows the number of hired farm workers and farms with hired workers as reported by the Census of Agriculture. Hired farm labor is defined as total farm workers, including regular workers, part-time workers, and paid family members, and excluding contract laborers. In 2012 the number of workers was 1,759. Two-thirds of these workers worked less than 150 days out of the year. Note that this is significantly higher than the EMSI job counts.

The number of workers decreased by 11 between 2007 and 2012. Between 2002 and 2012, the number of workers increased by 27%, while the number of farms with hired workers increased by 21%.

Of the 336 total farms with hired labor in Steuben County in 2012, 95 (28%) had just one hired worker, the largest category. Fifty-six farms (17%) employed 10 or more workers. On average, there were 5.2 workers per farm.

Hired Farm Workers and Farms with Hired Labor, by Total Workers on Farm						
Number of Hired Workers on Farm	Workers			Farms*		
	2002	2007	2012	2002	2007	2012
1	82	77	95	82	77	95
2	54	132	122	27	66	61
3-4	200	204	272	60	59	80
5-9	641	301	287	96	47	44
10+	411	1,056	983	22	61	56
Total	1,388	1,770	1,759	287	310	336

* Includes only farms with hired labor

Source: Census of Agriculture

In real terms, total farm payroll in Steuben County rose by 55% between 2002 and 2012, reaching almost \$16 million. Average earnings per worker also grew over this period, from \$7,667 in 2002 to \$9,068 in 2012, an increase of 18%. In 2012, the average Steuben County farm worker earned just 75% of the average New York farm worker's pay, and 92% of the average farm worker's pay nationwide.

Farm Worker Earnings (2012 Dollars)					
	2002*	2007*	2012	2012	2012
	Steuben	Steuben	Steuben	New York	United States
Total Payroll (\$1,000)	\$ 10,258	\$ 12,723	\$ 15,950	\$ 730,687	\$ 26,986,669
Hired Workers	1,338	1,770	1,759	60,944	2,736,417
Average Earnings per Worker	\$ 7,667	\$ 7,188	\$ 9,068	\$ 11,989	\$ 9,862

* Inflation-adjusted values. Reported in 2012 dollars.

Source: Census of Agriculture, Camoin Associates

Farm Tenure

The average age of a farm operator in Steuben County in 2012 was 55.9 years old. This is slightly less than the US average of 58 years old and the New York statewide average of 57.1 years old. A common challenge is attracting young people into farming. The prevalence of older farm owners means that much of the county's farmland will change hands over the next 20 years.

Nearly all of the farms in the County are owner operated. Only one-fifth of the County farmland is rented (82,000 acres out of 405,000 acres). Nationwide, about 40% of farmland is rented. This means that Steuben County has a stable farmland base, with relatively little farmland offered for sale to non-farmers each year.

Agricultural (Farm) Acreage

Steuben County has the most farm acreage of any county in New York, with 421,624 acres. Agricultural land is divided into four categories: cropland, pastureland, woodland, and other (which includes house lots, barn lots, roads, ditches, wasteland, etc. that are part of farm operations). About 53% of this acreage is dedicated to cropland, and 26% is woodland, with another 14% used for pastureland. The remaining 8% is “other” land. Steuben County ranks first in New York in terms of both cropland and woodland acreage, and second in terms of pastureland.

Agricultural Acreage						
Category of Farmland	Steuben County			New York		
	Acres	Percent of county farmland	Percent of total county area (889,966 acres)	Acres	Percent of state farmland	Percent of total state area (30,161,169 acres)
Cropland	221,713	53%	25%	4,217,019	57%	14%
Pastureland	58,663	14%	7%	985,420	13%	3%
Woodland	109,102	26%	12%	1,612,907	22%	5%
Other	32,146	8%	4%	628,073	8%	2%
Total	421,624	100%	47%	7,443,419	100%	25%

Source: Census of Agriculture

About 47% of all Steuben County land is dedicated to farming. In terms of percent of total county land devoted to farming, Steuben County ranks 10th. Nearby Seneca County ranks first by this metric, with 64% dedicated to farming. This compares to 25% for New York State as a whole.

Top 10 Counties, Agricultural Acreage		
Rank	County	Acres
1	Steuben	421,624
2	St. Lawrence	380,360
3	Jefferson	300,726
4	Chautauqua	244,398
5	Cayuga	242,692
6	Wyoming	231,329
7	Oneida	213,655
8	Cattaraugus	205,824
9	Livingston	198,499
10	Ontario	196,375

Source: Census of Agriculture

Top 10 Counties, Percent of Total County Land Dedicated to Agriculture		
Rank	County	Acres
1	Seneca	64%
2	Wyoming	61%
3	Yates	60%
4	Genesee	60%
5	Cayuga	55%
6	Orleans	54%
7	Montgomery	52%
8	Livingston	49%
9	Ontario	48%
10	Steuben	47%

Source: Census of Agriculture

Farms

Number of Farms and Acres of Farmland

In 2012, there were 1,667 farms in Steuben County, up from 1,578 in 2007—an increase of 89 farms (+6%). The number of acres covered by these farms increased by 9% between 2007 and 2012, from about 372,000 to about 406,000 acres. Consequently, the average farm size grew by 3% to 243 acres in 2012. The US Department of Agriculture defines a farm as capable of producing at least \$1,000 a year in farm products.

Steuben County Farms			
	2007	2012	% Change
Total farms (number)	1,578	1,667	6%
Land in farms* (acres)	371,932	405,727	9%
Average size of farm (acres)	236	243	3%

* Not equal to total agricultural land. Omits large acreages of woodland or wasteland held for non-agricultural purposes

Source: Census of Agriculture

The table below shows the number of farms by size in 2007 and 2012. In 2012, the median farm size was between 100 and 139 acres, significantly lower than the 243-acre average. This is explained by the presence of a relatively small number of large farms that are skewing the average upward. In 2012, there were 190 farms larger than 500 acres. While these farms accounted for only 11% of all farms, they accounted 50% of all farmland. By contrast, there were 700 farms smaller than 100 acres, accounting for 42% of all farms, but just 9% of all farmland.

While the number of farms increased by 6% overall, the pattern of change differed greatly by farm size. The greatest relative increase was seen for large farms—the number of 2,000+ acre farms increased by a third, and farms between 1,000 and 1,999 acres increased in number by 30%. At the opposite end of the spectrum, the smallest farms—those 9 acres or less—decreased by 7% (and lost 17% of their acreage), although the next smallest group—farms between 10 and 49 acres—increased by 26% (and gained 17% in acreage).

Overall, the data indicate that large farms drove the increase in acreage. While overall acreage grew by 9%, omitting farms of 1,000 acres and up reduces the increase in acreage to just 1.5%.

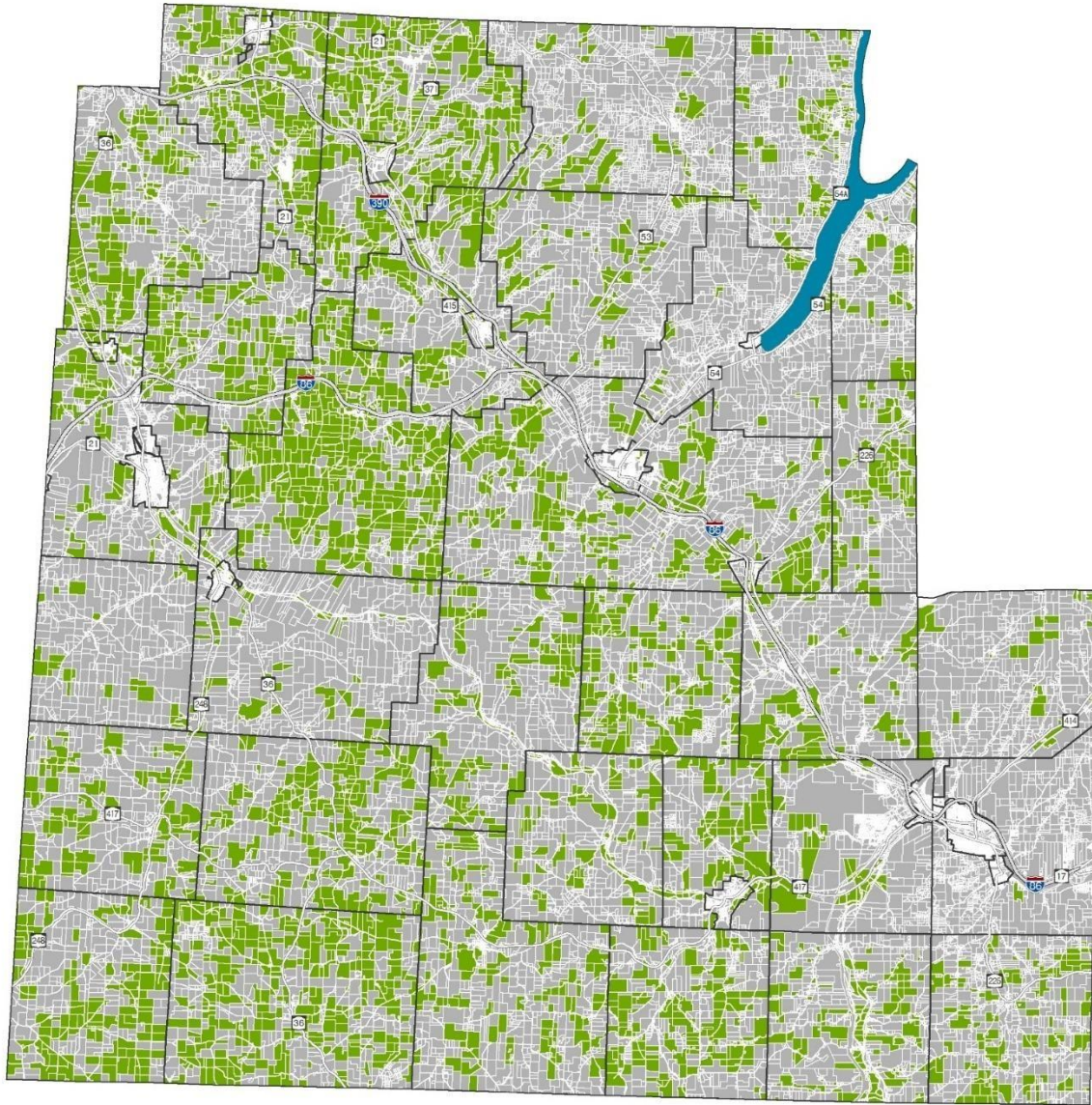
Steuben County Farms and Farmland Acreage, by Size of Farm

Size of Farm	Number of Farms			Farmland Acreage		
	2007	2012	% Change	2007	2012	% Change
1 to 9 acres	61	57	(7%)	314	260	(17%)
10 to 49 acres	211	265	26%	6,079	7,121	17%
50 to 69 acres	152	154	1%	8,783	9,011	3%
70 to 99 acres	206	224	9%	17,448	18,967	9%
100 to 139 acres	210	215	2%	24,769	25,265	2%
140 to 179 acres	143	132	(8%)	22,634	20,834	(8%)
180 to 219 acres	123	112	(9%)	24,467	21,994	(10%)
220 to 259 acres	95	108	14%	22,788	25,974	14%
260 to 499 acres	214	210	(2%)	76,411	74,240	(3%)
500 to 999 acres	108	118	9%	74,349	78,517	6%
1,000 to 1,999 acres	40	52	30%	55,236	70,290	27%
2,000 acres or more	15	20	33%	38,654	53,254	38%
Total	1,578	1,667	6%	371,932	405,727	9%

Source: Census of Agriculture

DRAFT

Steuben County Farmland



**Farmland indicated in green*

Farm Earnings

Net Cash Farm Income of the Operations is a Census of Agriculture metric calculated by subtracting total farm expenses from total sales, government payments, and other farm-related income. Of the 1,677 farms in Steuben County in 2012, 42% showed net gains, which is comparable to proportion of profitable farm operations at the state (44%) and national (46%) levels. The average operations income per farm in the County has doubled since 2002, increasing from \$15,733 to \$31,242. Most of that increase was realized between 2002 and 2007. The average County farm operation was slightly less profitable than the average state operation (\$31,242), and significantly less than the average national operation (\$43,750).

Net Cash Farm Income of the Operations* (2012 Dollars)					
	2002** Steuben	2007** Steuben	2012 Steuben	2012 New York	2012 United States
Net Cash Farm Income	\$23,631,000	\$44,138,000	\$52,081,000	\$1,216,800,000	\$92,281,080,000
Average Operations Income per Farm	\$ 15,733	\$ 27,970	\$ 31,242	\$ 34,240	43,750
Percent of Farms with Net Gains	42%	40%	42%	44%	46%
Average Net Gain, Farms with Net Gains	\$ 59,153	\$ 84,566	\$ 96,420	\$ 109,549	\$ 122,072
Average Net Loss, Farms with Net Losses	\$ (15,550)	\$ (10,341)	\$ (15,707)	\$ (25,315)	\$ (23,245)

* Derived by subtracting total farm expenses from total sales, government payments, and other farm-related income

** Inflation-adjusted values. Reported in 2012 dollars.

Source: Census of Agriculture, Camoin Associates

Farm Sales

Between 2007 and 2012, Steuben County product sales by farms increased from \$135 million to \$187 million, a nominal increase of \$52 million, or 38%. Adjusting for inflation, the increase was \$37 million, or 25%. The vast majority of this growth occurred as a result of increased sales from large-scale farms with sales over \$500,000. Of the 74 farms comprising this group, average sales exceeded \$1.7 million in 2012 (\$126,113,000 in total sales divided by 74 farms equals \$1,704,229). At the other end of the spectrum, the 385 farms with sales of less than \$1,000 had average sales of just \$145. Farms with less than \$10,000 a year in sales rarely earned a profit. They are considered “lifestyle” or “hobby” farms. There were 924 farms (55% of the county farms) that generated less than \$10,000 in sales in 2012. The 74 farms in the largest group accounted for only 4% of all farms, but 67% of all farm product sales. By contrast, farms with sales less than \$50,000 accounted for three-quarters of all farms, but just 5% of all sales.

A total of 709 farms (42%) in the county reported net profits in 2012 and 965 farms (58%) reported net losses. In 2012, a total of 857 farm operators (50% of the county farms) listed farming as their main occupation. Only 611 farm operators reported no days working away from the farm. This means that off-farm employment is important for most farms.

Steuben County Farms and Sales, by Value of Sales

Value of Sales*	Number of Farms			Sales (\$1,000)		
	2007	2012	% Change	2007*	2012	% Change
Less than \$1,000	460	385	(16%)	\$ 75	\$ 56	(25%)
\$1,000 to \$2,499	169	154	(9%)	\$ 278	\$ 259	(7%)
\$2,500 to \$4,999	143	195	36%	\$ 512	\$ 698	36%
\$5,000 to \$9,999	191	190	(1%)	\$ 1,371	\$ 1,401	2%
\$10,000 to \$19,999	129	185	43%	\$ 1,762	\$ 2,570	46%
\$20,000 to \$24,999	50	48	(4%)	\$ 1,101	\$ 1,069	(3%)
\$25,000 to \$39,999	72	79	10%	\$ 2,262	\$ 2,357	4%
\$40,000 to \$49,999	53	29	(45%)	\$ 2,322	\$ 1,293	(44%)
\$50,000 to \$99,999	89	129	45%	\$ 6,377	\$ 8,871	39%
\$100,000 to \$249,999	102	137	34%	\$ 16,698	\$ 21,791	31%
\$250,000 to \$499,999	62	62	0%	\$ 21,198	\$ 20,728	(2%)
\$500,000 or more	58	74	28%	\$ 81,332	\$ 126,113	55%
Total	1,578	1,667	6%	\$ 135,288	\$ 187,206	38%

* Reported in nominal dollars; not inflation-adjusted.

Source: Census of Agriculture

Farm Products

The 2012 Census of Agriculture, the most recent year for which data are available, provides greater detail with respect to animal and crop production in Steuben County. Sales of Steuben County farm products totaled \$187 million in 2012, up from \$150 million⁹ in 2007. Steuben County ranked seventh in New York in 2012 in terms of total farm sales, rising five places since 2007. The County ranked seventh in terms of 2012 crop sales, and tenth in terms of animal product sales.

Top 10 Counties, 2012 Agricultural Sales

Rank	County	2012 Sales	% of NY Sales
1	Wyoming	\$ 318,504,000	5.9%
2	Cayuga	\$ 293,474,000	5.4%
3	Suffolk	\$ 239,818,000	4.4%
4	Genesee	\$ 236,952,000	4.4%
5	Wayne	\$ 205,605,000	3.8%
6	St. Lawrence	\$ 187,363,000	3.5%
7	Steuben	\$ 187,206,000	3.5%
8	Livingston	\$ 186,809,000	3.5%
9	Jefferson	\$ 183,567,000	3.4%
10	Ontario	\$ 180,326,000	3.3%

Source: Census of Agriculture

⁹ Inflation-adjusted. Reported in 2012 dollars.

It is worth noting that while Steuben County ranked first in farm acreage, it was seventh in sales.

Animal products sales accounted for \$106 million in sales, with the remaining \$81 million attributed to crops. About 57% of all sales of County farm products were animal products, and 43% were crops. This closely mirrors the distribution at the state level. It is interesting to note that while Animal Production jobs greatly outnumber Crop Production jobs, the sales split is much more even, indicating that Animal Production is significantly more labor intensive.

Market Value of Agricultural Products Sold, 2012*				
	Steuben County		New York	
	Sales (\$1,000)	% of Total	Sales (\$1,000)	% of Total
Animal Products	\$ 105,906	57%	\$ 3,165,898	58%
Crops	\$ 81,300	43%	\$ 2,249,227	42%
Total	\$ 187,206	100%	\$ 5,415,125	100%

Source: Census of Agriculture, Camoin Associates

The following table ranks Steuben County farm products in terms of sales using 2007 and 2012 data. It is interesting to note that sales increased by 25% overall during the worst recession since the Great Depression. This clearly shows the strength of Steuben County's agricultural economy and its ability to be sustainable even during the worst economic times.

Steuben County - Top Agricultural Products by Sales (2012 Dollars)

Product	2007 Sales† (\$1,000)	2012 Sales (\$1,000)	Change (\$1,000)	% Change	2007 % of Total Sales	2012 % of Total Sales	2012 Rank, NY Counties
Milk from cows*	\$ 83,331	\$ 78,472	\$ (4,859)	(6%)	55.6%	41.9%	11
Corn	\$ 6,854	\$ 25,859	\$ 19,005	277%	4.6%	13.8%	9
Cattle and calves	\$ 13,138	\$ 17,655	\$ 4,517	34%	8.8%	9.4%	5
Hay and other field crops**	\$ 9,157	\$ 16,686	\$ 7,529	82%	6.1%	8.9%	4
Nursery, greenhouse, floriculture, and sod	\$ 5,448	\$ 15,920	\$ 10,472	192%	3.6%	8.5%	5
Vegetables, melons, potatoes, and sweet potatoes	\$ 13,118	\$ 10,957	\$ (2,161)	(16%)	8.8%	5.9%	12
Hogs and pigs	\$ 4,214	(D)	--	--	2.8%	--	--
Fruits, tree nuts, and berries	\$ 4,586	\$ 3,838	\$ (748)	(16%)	3.1%	2.1%	13
Other grains, oilseeds, dry beans, and dry peas***	\$ 1,560	\$ 3,489	\$ 1,929	124%	1.0%	1.9%	1
Soybeans	\$ 519	\$ 2,969	\$ 2,450	472%	0.3%	1.6%	16
Wheat	\$ 187	\$ 807	\$ 620	331%	0.1%	0.4%	13
Horses and ponies	(D)	\$ 472	--	--	--	0.3%	25
Cut Christmas trees	(NA)	\$ 353	--	--	--	0.2%	2
Sheep and lambs	(NA)	\$ 331	--	--	--	0.2%	10
Maple syrup	(NA)	\$ 286	--	--	--	0.2%	14
Goats and kids	(NA)	\$ 136	--	--	--	0.1%	6
Alpacas	(NA)	\$ 53	--	--	--	0.0%	5
Wool	(NA)	\$ 10	--	--	--	0.0%	4
Mules, burros, and donkeys	(D)	\$ 3	--	--	--	0.0%	11
Rabbits	(NA)	\$ 1	--	--	--	0.0%	23
Total (includes products not listed)	\$ 149,802	\$ 187,206	\$ 37,404	25%			7

† Inflation-adjusted values. Reported in 2012 dollars.

(D) Withheld to avoid disclosing data for individual farms

* 2007 sales figures include other dairy products from cow s. (NA) Not available

** May include crops such as grass seed, hay and grass silage, haylage, greenchop, hops, mint for oil, and others.

*** All grains, oilseeds, dry beans, and dry peas, excluding corn, wheat, soybeans, sorghum, barley, and rice.

Note: Products listed account for 94.9% of 2007 agricultural sales and 95.2% of 2012 agricultural sales.

Source: Census of Agriculture, Camoin Associates

Milk

Milk from cows accounted for \$78 million in sales in 2012, far exceeding the second-ranked product. Milk sales made up 42% of all agricultural sales in the County, compared to 45% at the state level. In the table above, 2007 milk sales are likely slightly overstated since other dairy products were included with milk in the 2007 Census of Agriculture. As a result, the true decrease in milk sales is likely less than the 6% reported in the table, although it is clear that there was a decrease. In addition, milk as a percentage of total sales decreased significantly between 2007 and 2012, from 56% to 42%. Steuben County's milk sales ranked 11th in the state in 2012. New York is the third leading dairy producing state in 2014, behind California and Wisconsin. New York is the leading producer of yogurt.

Corn

Corn was the second highest selling product, with \$26 million in sales and representing 14% of all sales. It had the highest sales growth in absolute terms, increasing by \$19 million and almost quadrupling over that period. Nursery, greenhouse, floriculture, and sod also grew substantially, adding over \$10 million in sales. In percentage terms, soy beans and wheat showed the most growth, increasing by 472% and

331%, respectively, although both products continued to account for a very small proportion of total sales.

Other than milk, the only two product groups that showed decreases in sales were vegetables, melons, potatoes, and sweet potatoes; and fruits, tree nuts, and berries. Both groups decreased by 16%.

Farm Expenses

The table below shows aggregated farm production expenses for Steuben County in 2012, according to the Census of Agriculture. It provides insight into the inputs that County farmers are purchasing. The industries associated with production of these inputs could potentially be opportunities for expansion within the County as local sourcing becomes more desirable. Steuben County farms spent over \$145 million in 2012. By far, the greatest expense to farms was animal feed, which cost farmers \$34 million and accounted for 23% of all expenses. Hired farm labor was the second largest expense, followed by repairs, supplies, and maintenance costs.

Steuben County Farm Production Expenses, 2012		
Item	Total Expense, 2012	% of Total
Feed purchased	\$ 33,599,000	23.2%
Hired farm labor	\$ 15,950,000	11.0%
Repairs, supplies, and maintenance costs	\$ 14,518,000	10.0%
All other production expenses*	\$ 12,808,000	8.8%
Gasoline, fuels, and oils purchased	\$ 11,304,000	7.8%
Fertilizer, lime, and soil conditioners purchased	\$ 10,523,000	7.3%
Property taxes paid	\$ 9,301,000	6.4%
Seeds, plants, vines, and trees purchased	\$ 8,400,000	5.8%
Livestock and poultry purchased or leased	\$ 7,015,000	4.8%
Chemicals purchased	\$ 5,698,000	3.9%
Interest expense	\$ 4,748,000	3.3%
Utilities	\$ 3,898,000	2.7%
Cash rent for land, buildings, and grazing fees	\$ 3,342,000	2.3%
Customwork and custom hauling**	\$ 2,650,000	1.8%
Rent and lease expenses for machinery, equipment, and farm share of vehicles	\$ 816,000	0.6%
Contract labor	\$ 514,000	0.4%
Total	\$ 145,084,000	100.0%

* Examples include animal health costs, storage and warehousing, marketing and insurance expenses, etc.

** Examples of customwork include planting, spraying, harvesting, preparation of products for marketing, grinding and mixing feed, corn picking, grain drying, and silo filling.

Source: Census of Agriculture

With farmers spending so much money on feed, there could be an opportunity for Steuben County to keep those dollars in the county by attracting feed processing and manufacturing firms and wholesalers.

Agriculture Supply Chain

Animal and crop production (i.e. farming) represent only one link in Steuben County's agriculture supply chain. Production of agricultural goods requires many inputs, and these goods go on to serve as inputs to other products manufactured downstream. To gain an understanding of how Steuben County businesses fit into the rest of the agriculture supply chain, we conducted an analysis of the other sectors that play a crucial role in farm production, either as suppliers or purchasers of farm goods. This analysis serves to identify opportunities for Steuben County to expand its role in the agriculture supply chain. Below is a list of all 6-digit NAICS categories that play a part in the supply chain (either upstream or downstream) for the types of farm goods produced in Steuben County.

Industries are divided into three groups:

- Suppliers of Inputs to Farm Production – Establishments that are upstream from animal and/or crop production in the supply chain
- Purchasers of Farm Products – Establishments that are downstream from animal and/or crop production in the supply chain
- Transportation and Storage of Agricultural Products – Establishments involved in transporting, warehousing, and storage of agricultural products between stages in the supply chain

Suppliers of Inputs to Farming

Establishments in this group supply goods or services to producers of farm products (both animals and crops) in Steuben County. They include firms engaged in planting and harvesting, as well as providing farm labor, managements services, or other types of support activities. Manufacturers, wholesalers, and sellers of fertilizers, pesticides, farm machinery, and other farm inputs are included, as well as veterinarians. Of the 17 sectors in this group, nine are represented in Steuben County. Veterinary Services, Nursery/Garden Center/Farm Supply Stores, and Farm Labor Contractors and Crew Leaders had the most jobs. Almost all of the sectors with at least one job showed positive job growth between 2003 and 2013. The only industry that lost jobs was Farm Machinery and Equipment Manufacturing, which shed all of the 26 jobs that existed in 2003. There is currently no employment related to manufacturing of farm inputs. Overall, employment in this group increased by 49 jobs between 2003 and 2013, and is expected to add another 32 jobs by 2023. Almost all of these new jobs will be in Nursery, Garden Center, and Farm Supply Stores.

In addition to the sectors that do have operations and jobs in Steuben, there are also industries with no (or nearly no) representation that could pose an opportunity for growth. For example, fertilizer manufacturing, tractor and farm equipment manufacturing, farm management services, and farm product wholesalers, just to name a few. These are industries that would fit nicely with the current agricultural economy of the county and could potentially be attracted to Steuben.

Suppliers of Inputs to Farm Production, 6-digit NAICS											
NAICS Code	Description	2003 Jobs	2013 Jobs	2023 Jobs (projected)	Change 2003–2013	% Change 2003–2013	Projected Change 2013–2023	Projected % Change 2013–2023	2013 National Location Quotient	2014 Avg. Earnings Per Job	2013 Establishments
115112	Soil Preparation, Planting, and Cultivating	<10	<10	<10	--	--	--	--	--	--	0
115113	Crop Harvesting, Primarily by Machine	0	<10	<10	--	--	--	--	--	--	1
115114	Postharvest Crop Activities (except Cotton Ginning)	0	<10	<10	--	--	--	--	--	--	0
115115	Farm Labor Contractors and Crew Leaders	37	47	45	10	27%	(2)	(4%)	0.62	\$17,023	1
115116	Farm Management Services	0	0	0	0	0%	0	0%	0.00	\$0	0
115210	Support Activities for Animal Production	<10	12	11	--	--	(1)	(8%)	1.09	\$21,878	2
325311	Nitrogenous Fertilizer Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
325312	Phosphatic Fertilizer Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
325314	Fertilizer (Mixing Only) Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
325320	Pesticide and Other Agricultural Chemical Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
333111	Farm Machinery and Equipment Manufacturing	26	0	0	(26)	(100%)	0	0%	0.00	\$0	0
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
424520	Livestock Merchant Wholesalers	<10	<10	<10	--	--	--	--	--	--	1
424590	Other Farm Product Raw Material Merchant Wholesalers	<10	0	0	--	--	0	0%	0.00	\$0	0
424910	Farm Supplies Merchant Wholesalers	20	23	25	3	15%	2	9%	0.75	\$36,564	2
444220	Nursery, Garden Center, and Farm Supply Stores	11	52	79	41	373%	27	52%	1.60	\$22,446	8
541940	Veterinary Services	79	88	94	9	11%	6	7%	1.00	\$36,479	8
	Total	173	222	254	49	28%	32	14%			23

Source: EMSI, Camoin Associates

Purchasers of Farm Products

This group consists of establishments positioned downstream of crop and animal production in the supply chain. It includes processors of crops and animal products, manufacturers of food for both human and animal consumption, wholesalers of agriculturally derived goods, as well as retailers of food and other agricultural products. It also includes breweries, wineries, bars, and restaurants. Of the 78 6-digit NAICS sectors in this group, 26 had at least one job in Steuben County in 2013. In general, employment was higher for firms closer to the end of the agricultural supply chain. Restaurants and food retailers showed the highest job counts, but generally had location quotients below 2. Sectors with location quotients greater than 3 fell into two categories: dairy processing industries and wineries.

There are dozens of industries that would be purchasers of agricultural products that are not represented in Steuben County who, if attracted, could boost the local economy by increasing their purchasing of goods and services. For example, there are many food product manufacturers that are not in Steuben County but if attracted may then buy their inputs from Steuben farmers.

Purchasers of Farm Products, 6-digit NAICS											
NAICS Code	Description	2003 Jobs	2013 Jobs	2023 Jobs (projected)	Change 2003–2013	% Change 2003–2013	Projected Change 2013–2023	Projected % Change 2013–2023	2013 National Location Quotient	2014 Avg. Earnings Per Job	2013 Establishments
Manufacturing											
311111	Dog and Cat Food Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311119	Other Animal Food Manufacturing	13	<10	<10	--	--	--	--	--	--	2
311211	Flour Milling	0	0	0	0	0%	0	0%	0.00	\$0	0
311212	Rice Milling	0	0	0	0	0%	0	0%	0.00	\$0	0
311213	Malt Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311221	Wet Corn Milling	0	0	0	0	0%	0	0%	0.00	\$0	0
311222	Soybean Processing	0	0	0	0	0%	0	0%	0.00	\$0	0
311223	Other Oilseed Processing	0	0	0	0	0%	0	0%	0.00	\$0	0
311225	Fats and Oils Refining and Blending	0	0	0	0	0%	0	0%	0.00	\$0	0
311230	Breakfast Cereal Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311311	Sugarcane Mills	0	0	0	0	0%	0	0%	0.00	\$0	0
311312	Cane Sugar Refining	0	0	0	0	0%	0	0%	0.00	\$0	0
311313	Beet Sugar Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311320	Chocolate and Confectionery Manufacturing from Cacao Beans	0	0	0	0	0%	0	0%	0.00	\$0	0
311330	Confectionery Manufacturing from Purchased Chocolate	<10	0	0	--	--	0	0%	0.00	\$0	0
311340	Nonchocolate Confectionery Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311412	Frozen Specialty Food Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311421	Fruit and Vegetable Canning	0	0	0	0	0%	0	0%	0.00	\$0	0
311422	Specialty Canning	0	0	0	0	0%	0	0%	0.00	\$0	0
311423	Dried and Dehydrated Food Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311511	Fluid Milk Manufacturing	168	202	282	34	20%	80	40%	14.32	\$78,788	1
311512	Creamery Butter Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311513	Cheese Manufacturing	373	332	238	(41)	(11%)	(94)	(28%)	28.93	\$70,374	1
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311520	Ice Cream and Frozen Dessert Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311611	Animal (except Poultry) Slaughtering	0	0	0	0	0%	0	0%	0.00	\$0	0
311612	Meat Processed from Carcasses	<10	<10	<10	--	--	--	--	--	--	1
311613	Rendering and Meat Byproduct Processing	0	0	0	0	0%	0	0%	0.00	\$0	0
311615	Poultry Processing	0	0	0	0	0%	0	0%	0.00	\$0	0
311711	Seafood Canning	0	0	0	0	0%	0	0%	0.00	\$0	0
311712	Fresh and Frozen Seafood Processing	0	0	0	0	0%	0	0%	0.00	\$0	0
311811	Retail Bakeries	<10	18	23	--	--	5	28%	0.81	\$17,285	3
311812	Commercial Bakeries	27	0	0	(27)	(100%)	0	0%	0.00	\$0	0
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311821	Cookie and Cracker Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311822	Flour Mixes and Dough Manufacturing from Purchased Flour	0	0	0	0	0%	0	0%	0.00	\$0	0
311823	Dry Pasta Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311830	Tortilla Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311911	Roasted Nuts and Peanut Butter Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311919	Other Snack Food Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311920	Coffee and Tea Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311930	Flavoring Syrup and Concentrate Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311942	Spice and Extract Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311991	Perishable Prepared Food Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
311999	All Other Miscellaneous Food Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
312111	Soft Drink Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
312112	Bottled Water Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
312113	Ice Manufacturing	0	0	0	0	0%	0	0%	0.00	\$0	0
312120	Breweries	0	<10	12	--	--	--	--	--	--	2
312130	Wineries	104	162	198	58	56%	36	22%	12.50	\$39,029	8
312140	Distilleries	0	0	0	0	0%	0	0%	0.00	\$0	0
	Subtotal, Manufacturing	685	714	753	29	4%	39	5%			18

Purchasers of Farm Products, 6-digit NAICS (continued)											
NAICS Code	Description	2003 Jobs	2013 Jobs	2023 Jobs (projected)	Change 2003–2013	% Change 2003–2013	Projected Change 2013–2023	Projected % Change 2013–2023	2013 National Location Quotient	2014 Avg. Earnings Per Job	2013 Establishments
Wholesalers											
424410	General Line Grocery Merchant Wholesalers	0	0	0	0	0%	0	0%	0.00	\$0	0
424420	Packaged Frozen Food Merchant Wholesalers	0	0	0	0	0%	0	0%	0.00	\$0	0
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers	41	40	49	(1)	(2%)	9	23%	3.58	\$39,591	3
424470	Meat and Meat Product Merchant Wholesalers	<10	14	14	--	--	0	0%	1.37	\$37,521	2
424480	Fresh Fruit and Vegetable Merchant Wholesalers	<10	<10	<10	--	--	--	--	--	--	1
424490	Other Grocery and Related Products Merchant Wholesalers	<10	0	<10	--	--	--	--	0.00	\$0	0
424510	Grain and Field Bean Merchant Wholesalers	0	0	0	0	0%	0	0%	0.00	\$0	0
424810	Beer and Ale Merchant Wholesalers	0	0	0	0	0%	0	0%	0.00	\$0	0
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers	0	0	0	0	0%	0	0%	0.00	\$0	0
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	<10	<10	<10	--	--	--	--	--	--	1
	Subtotal, Wholesalers	41	54	63	13	32%	9	17%			7
Retail and Restaurants											
445110	Supermarkets and Other Grocery (except Convenience) Stores	1,054	905	738	(149)	(14%)	(167)	(18%)	1.40	\$24,535	18
445120	Convenience Stores	108	101	65	(7)	(6%)	(36)	(36%)	2.24	\$17,979	12
445210	Meat Markets	11	<10	<10	--	--	--	--	--	--	1
445230	Fruit and Vegetable Markets	<10	<10	<10	--	--	--	--	--	--	0
445299	All Other Specialty Food Stores	31	39	45	8	26%	6	15%	1.73	\$16,387	5
445310	Beer, Wine, and Liquor Stores	38	64	104	26	68%	40	63%	1.56	\$22,493	10
453110	Florists	47	22	13	(25)	(53%)	(9)	(41%)	1.03	\$18,530	5
722110	Full-Service Restaurants	1,000	1,226	1,368	226	23%	142	12%	0.94	\$17,280	85
722211	Limited-Service Restaurants	681	671	616	(10)	(1%)	(55)	(8%)	0.66	\$15,766	45
722212	Cafeterias, Grill Buffets, and Buffets	51	40	24	(11)	(22%)	(16)	(40%)	1.19	\$14,267	4
722213	Snack and Nonalcoholic Beverage Bars	41	78	92	37	90%	14	18%	0.56	\$13,224	14
722310	Food Service Contractors	40	11	<10	(29)	(73%)	--	--	0.08	--	3
722320	Caterers	<10	25	39	--	--	14	56%	0.47	\$42,570	5
722330	Mobile Food Services	<10	<10	<10	--	--	--	--	--	--	1
722410	Drinking Places (Alcoholic Beverages)	84	80	83	(4)	(5%)	3	4%	0.81	\$13,505	18
	Subtotal, Retail and Restaurants	3,186	3,262	3,187	76	2%	(75)	(2%)			226
	Total	3,912	4,030	4,003	118	3%	(27)	(1%)			251

Source: EMSI, Camoin Associates

Dairy Manufacturing

Cheese Manufacturing had the highest location quotient of all industries, 28.93, followed by Fluid Milk Manufacturing, with an LQ of 14.32. These industries accounted for 332 and 202 jobs, respectively. Dairy Product Merchant Wholesalers also had a relatively high LQ of 3.58 and supported 40 jobs. There was very limited employment in sectors involved in manufacturing and processing agricultural products other than dairy and wine.

According to EMSI, there was one cheese manufacturing establishment and one fluid milk manufacturing establishment. Kraft Foods has a production plant in Campbell, where it manufactures cheeses under the Kraft and Polly-O brands, and Crowley Foods, part of Hood, has a dairy production facility located in Arkport. Together, these establishments account for over three-quarters of the agriculture-related manufacturing jobs in the County. While cheese manufacturing is expected to shed almost 100 jobs by 2023, milk production is projected to add 80 jobs.

Wineries

Wineries had a location quotient of 12.50, relative to the nation, and supported 162 jobs in 2013. Jobs grew by 56% between 2003 and 2013. Wineries, though they account for fewer jobs than dairy manufacturing, are a more fragmented industry. Some of the major wineries in Steuben County are

Bully Hill, Chateau Renaissance Wine Cellars, Domaine LeSeurre Winery, Dr. Frank, Heron Hill, Keuka Lake Vineyards, Lime Berry Winery, Pleasant Valley Wine, and Ravines Wine Cellars.

The winery sector in Steuben County has been changing over the years with a transition in some cases from land owners having full winery operations to instead use the land as a vineyard and selling the grapes to larger producers. This trend has been occurring as the land is being handed from one generation to the next, with some parcels being subdivided into lots for houses. One reason for the transition away from wineries is due to the expense of crushing grapes and the fact that there are some substantial wineries in the area that are looking to purchase the grapes. In addition, there has been recent over supply of concord grapes resulting from overplanting in recent years, resulting in an oversaturated market and a reduced price.

Breweries

There are two breweries currently open in Steuben County, with a third slated to open soon, and a fourth in the works. All of these are microbreweries¹⁰.

In June 2012, Governor Cuomo passed brewery legislation to strengthen New York's craft beer industry. The new law introduces the Small Farm Brewery License, which provides a number of benefits to license-holders:

- **Increasing Retail Outlets for New York Products** – The legislation allows Farm Breweries to sell New York State labelled beer, wine, and liquor at their retail outlets. In addition, Farm Wineries would also be permitted to sell New York State labeled beer for off-premises consumption.
- **Allowing Farm Breweries to Open Restaurants** – The legislation allows Farm Breweries to obtain licenses to operate restaurants, conference centers, inns, bed and breakfasts, or hotels on or adjacent to the farm brewery.
- **Increasing Tastings** – The legislation allows both Farm Breweries and Farm Wineries to conduct tastings of New York State produced beer and wine at their premises.
- **Selling Related Products** – The legislation allows farm breweries to sell beer-making equipment and supplies, food complementing beer tastings, souvenir items, and additional products similar to those allowed under the Farm Winery statute.

In order to obtain the license, breweries must source at least 20% of the hops and 20% of the other ingredients from New York State. In 2018, the minimum threshold will increase to 60%, and then to 90% in 2023.

Barley and hops are two agricultural beer inputs that can be produced in Steuben County and could be potential opportunities for growth. According to the 2012 Census of Agriculture, the County produced 29,412 bushels of barley and was the fourth largest producer in the state.¹¹ No hops production was reported for the County. There are also no facilities for malting barley or drying and pelleting hops, additional opportunities for the County.

Wholesalers

There were 54 jobs associated with agriculture-related wholesaling in 2013, up from 41 in 2003. The bulk of wholesaling jobs were in Dairy Product Merchant Wholesalers. According to EMSI, there were 3

¹⁰ Microbrewery is defined as a limited-production brewery, typically producing specialty beers and often selling its products only locally.

¹¹ The value of barley sales was withheld by the Census of Agriculture to avoid disclosing data for individual farms.

of these establishments in Steuben County, including pizza supply wholesaler Southern Tier Provisions of South Bath and Golden Age Cheese Company, a cheese wholesaler located in Woodhull.

Transportation and Storage of Agricultural Products

The final grouping of sectors that support the agricultural industry relates to the transportation, warehousing, and storage of agricultural products. These sectors are characterized by establishments involved in moving crop and animal products in various forms along the supply chain to where they are eventually purchased by individual consumers. These firms transport products from farms to processors and manufacturers to distributors and wholesalers, and finally on to retailers. While the largest employers in this industry were Local and Long-Distance General Freight Trucking, these sectors had location quotients below 1. Farm Product Warehousing and Storage, though it only accounted for 17 jobs in 2014, had an LQ of 6.45. This was an increase from 0 jobs in 2004. Jobs in this sector were high-paying, with average earnings of close to \$73,000.

NAICS Code	Description	2003 Jobs	2013 Jobs	2023 Jobs (projected)	Change 2003–2013	% Change 2003–2013	Projected Change 2013–2023	Projected % Change 2013–2023	2013 National Location Quotient	2014 Avg. Earnings Per Job	2013 Establishments
484110	General Freight Trucking, Local	28	72	116	44	157%	44	61%	0.91	\$42,259	11
484121	General Freight Trucking, Long-Distance, Truckload	200	154	82	(46)	(23%)	(72)	(47%)	0.97	\$67,016	8
484122	General Freight Trucking, Long-Distance, Less Than Truckload	<10	<10	<10	–	–	–	–	–	–	0
493120	Refrigerated Warehousing and	0	0	0	0	0%	0	0%	0.00	\$0	0
493130	Farm Product Warehousing and Storage	0	16	33	16	–	17	106%	5.97	\$72,847	1
	Total	228	242	231	14	6%	(11)	(5%)			20

Source: EMSI, Camoin Associates

Agriculture and Education

Higher Education

Steuben County does not currently have any schools that offer agricultural programs. The County's only college is Corning Community College, part of the SUNY system. The nearest school with an agricultural program is Alfred State College, located in neighboring Allegany County. Alfred State offers the following agriculture-related degree programs within its Department of Agriculture and Veterinary Technology:

- Agricultural Business (Associate in Applied Science)
- Agricultural Technology (Associate in Applied Science)
- Veterinary Technology (Associate in Applied Science)

Cornell Cooperative Extension

Cornell Cooperative Extension (CCE) is a partnership among federal, state, and local governments, the national land grant system, and Cornell University. Its mission is to extend Cornell University's land-grant programs to citizens all across New York State. With a presence in every county and New York City, CCE puts research into practice by providing high-value educational programs and university-based resources that help solve real-life problems. An integrated network of professionals including campus-based faculty and staff, regionally deployed specialists and county-based educators and professional employees provide programs in five areas:

- **Agriculture and Food Systems** – CCE supports a New York State agriculture industry that is diverse, sustainable, and profitable, and which produces a safe, reliable, healthy and local food supply.

- **Community and Economic Vitality** – CCE engages New Yorkers in land-use training, inter-municipal collaboration on shared municipal services, leadership training, workforce development, and community decision-making on complex issues.
- **Environment and Natural Resources** – CCE educates on a broad range of concerns: water resources, agricultural waste and land-use management, forestry, wildlife habitat, lawns and turf, invasive species, energy conservation and development of renewable energy sources.
- **Nutrition and Healthy Families** – CCE programs aim to reduce the prevalence of childhood obesity and chronic disease through improved nutrition and health practices, to improve child and eldercare, to reduce environmental hazards, and to increase financial and health care literacy.
- **Youth Development** – CCE’s 4-H Youth Development Programs reach urban, suburban and rural youth in three broad areas: Science, Technology and Engineering, Citizenship, and Healthy Lifestyles.

CCE has historically been organized at the county level, with Steuben County’s CCE office in Bath. Due to funding challenges, however, a shift from county-based programs to regional program networks is in the process of being implemented. The shift away from the county-based programs could be a challenge for agriculture development in Steuben County.

CCE-Steuben has undertaken a variety of projects to support local agriculture:

- **MeatSuite website** – CCE Agricultural Educators created the MeatSuite website (<http://meatsuite.com>) with the mission of increasing “freezer trade”—the sale of whole, halves, and quarters of animals and bulk bundles of meat—in Steuben County and the surrounding region. Once logged onto the website, a user can input his or her zip code to locate nearby farms where specific meat products can be purchased. The website has been instrumental in facilitating the local sourcing of meat products.
- **Livestock pasture walks** – An informal advisory group known as the Tri-County Grazing Group hosts several pasture walks each year, on which farmers share best practices and exchange information related to livestock grazing. This collaboration has contributed to the growing interest in local meat production.
- **Public engagement** – CCE-Steuben hosts events to educate the public on topics including dairy, field crops, livestock, farm business management, and horticulture. Farm City Day is an event used to showcase the County’s agriculture to the public.
- **High Tunnel grant** – This grant was used to network Steuben County fruit and vegetable growers with other growers across the state. Farmers share techniques for improving quality and increasing profits.

Agri-tourism

Steuben County is well positioned to increase the role of agri-tourism in its economy. In 2012, 41 farms in Steuben County reported income from agri-tourism and recreational services, including income from hunting, fishing, farm or wine tours, hay rides, and other services. This almost doubled since 2007, when only 24 farms reported such income. However, while the number of farms with tourism-related income doubled, income itself declined from \$188,000 to \$149,000. The increase in farms receiving income from agri-tourism is important, as it shows an increase in the propensity for businesses to be getting involved in agri-tourism related activities but the decline in income is not as meaningful since reporting in this category can be difficult due to variations in reporting methods.

Many opportunities for expanding this industry can be seized through cooperative marketing efforts between farms, restaurants, bed and breakfasts, and other businesses. Black Sheep Inn is a leader in agri-tourism, as it offers stays packaged with farm tours. Some restaurants have shown an interest in farm-to-table arrangements with local farms, though this is especially challenging with meat products given the lack of processing facilities.

Farmers' Markets

There are at least 8 weekly farmers' markets in Steuben County:

- Addison Farmers' Market
- Bath Farmers' Market
- Corning Farmers' Market
- Corning Winter Farmers' Market
- Hammondsport Farmers' Market
- Harvest and Artists Market
- Hornell Farmers' Market
- Prattsburgh Farmers' Market

Most of the farmers' markets runs from late spring to mid-autumn, with the exception of the Corning Winter Farmers' Market, which runs from November to March.

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