Agribusiness Development Feasibility Study

Town of Amherst, NY | July 2022



Prepared for:

Amherst Industrial Development Agency



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Executive Summary

Camoin Associates conducted a preliminary market feasibility study for agribusiness development in the Town of Amherst, NY for the Amherst Industrial Development Agency and the Town to understand the potential opportunities for three sites of interest in the northern area of the Town. The analysis examined site characteristics, real estate and industry trends, and supply chain opportunities, and included insights gained from interviews with local farmers and agribusiness experts. The results indicated that Amherst (and the three sites) is generally well positioned to fill local agribusiness niche needs and opportunities due to its proximity to consumers, retail outlets, and local producers. Several specific agribusiness opportunities were identified as shown in Table 1. A more comprehensive market study for each use may be necessary to confirm feasibility and identify the most market-viable concept or concepts.

Table 1

Summary: Market Feasibility Assessment

Opportunity	Feasibility	Description	Key Analysis Findings
Shared-use Commercial Kitchen	High	A shared use licensed commercial kitchen available to local agricultural producers and small businesses primarily for creating value-added food products. May include co-packing facilities as part of the concept or subsequent phase. Opportunity for incubator programming. Opportunity to be co-located with a farmer's market.	 Concentration of small producers and ag-related entrepreneurs Lack of similar facilities within reasonable distance from area producers Interviews confirm demand and market potential for facility Successful examples in similar markets
Brewery with Food + Beverage/ Entertainment	High	A microbrewery (or distillery) with destination appeal by offering differentiated product and food/beverage or other entertainment options. Opportunity for co-location with other destination agribusinesses such as farmers market.	 Strong industry growth trends Significant population base within reasonable drive-time distance and easy access Lack of immediate competitors in the vicinity of potential sites
Indoor Farming	Moderate to High	This may consist of greenhouse growing or industrial space for hydroponics/aquaponics and similar. The scale of facilities can range considerably.	 Industry and market strengths in crops well aligned for indoor growing, particularly vegetables and horticulture. Growing demand for locally grown, fresh products will drive need for indoor growing in western New York climate. Viability expected to be greater for greenhouse-based growing relative to "soilless" such as aquaponics/hydroponics, although some opportunity appears to exist.
Value-Added Food Product Manufacturing	Moderate	Small-scale value-add food manufacturing operation with inputs from local producers. Typically consist of light industrial/flex building with truck bays/access.	 Several product type opportunities including perishable prepared foods, desserts and baked goods, specialty dairy products, and other specialty products. Proximity to retailers and restaurants Favorable industry and real estate trends
Cold Storage	Limited to Moderate	Facility serving regional cold storage and distribution needs. Typically a warehouse style facility that requires more intensive truck activity than other agribusiness users.	 Limited availability and high demand for cold storage in the region. Aligns with types of produce and crops being produced locally Easy access via interstate a key need for truck traffic However, high levels of trucking activity may be incompatible with some sites.

1. Introduction

Overview

The Town of Amherst Industrial Development Agency (IDA) in partnership with the Town of Amherst commissioned this study to explore the market feasibility of the development of an agribusiness facility or facilities in the Town. The study follows the Town's Farmland Protection and Agricultural Development Plan, completed in 2021, and explores in greater detail opportunities for value-added manufacturing, indoor growing, packaging and shipping, refrigerated warehouse, and other types of facilities that may be feasible in the community given local and regional industry and market trends.

Methodology

This study provides an overview of potentially feasible options, which may require further investigation and detailed study. The study also considers three (3) potential development sites, including two privately owned properties and one that is owned by the Town. To understand the potential agribusiness market opportunities for these sites in Amherst, the following tasks were completed:

- 1. Interviews: Interviews were conducted with local and regional agriculture and agribusiness stakeholders and experts to understand opportunities for which Amherst is well positioned to take advantage of.
- 2. Overview of Sites: Key details of the three potential sites were documented and analyzed including physical development constraints and infrastructure/utility availability.

- 3. Competitive Assessment: An analysis was conducted to understand the potential competitive positioning of the three sites with respect to other available development sites and agribusiness-focused industrial parks in the region.
- 4. Agribusiness Industry Profile and Trends: Trends in local and regional agricultural production, including growing/declining agricultural products, expanding agribusiness industry sectors, most concentrated agribusiness industries, and other similar economic analysis to identify agribusiness industry opportunities.
- 5. Agriculture Supply Chain Analysis: Supply chain data was analyzed to understand whether potential gaps exist in the region that could potentially be filled through agribusiness development in Amherst.
- 6. Summary of Opportunities and Challenges: The study concludes with a discussion of the most feasible opportunities for agribusiness development in Amherst, as well as identified challenges for future agribusiness development.

2. OVERVIEW OF POTENTIAL SITES

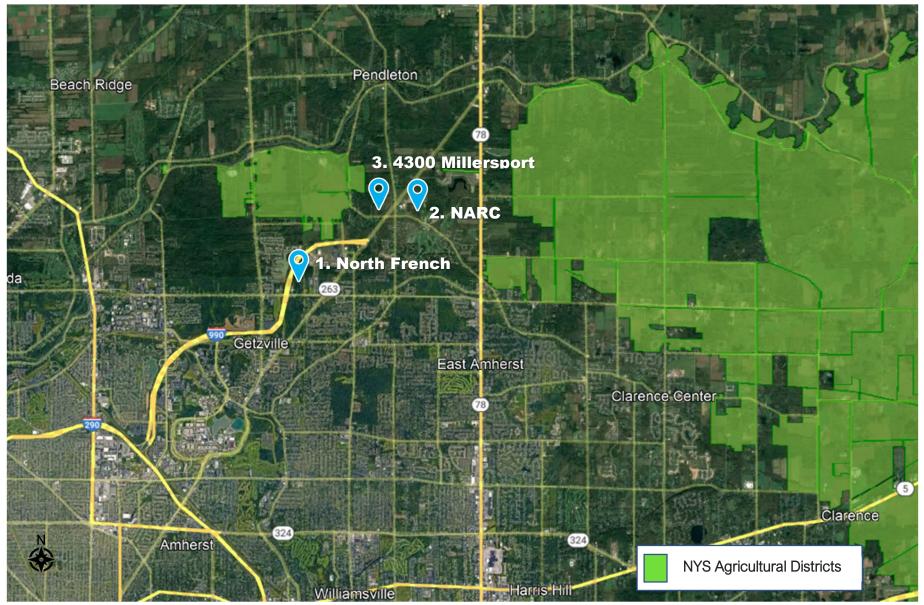
The Town of Amherst and the IDA identified three (3) potential agribusiness development opportunity sites within the community (see Table 2). The sites include two privately owned properties for which there is active development interest and a town-owned property used currently for a recreation center but with a sizeable undeveloped area potentially suitable for agribusiness use.

This section provides an overview of the sites and a brief assessment of their suitability for agribusiness development.

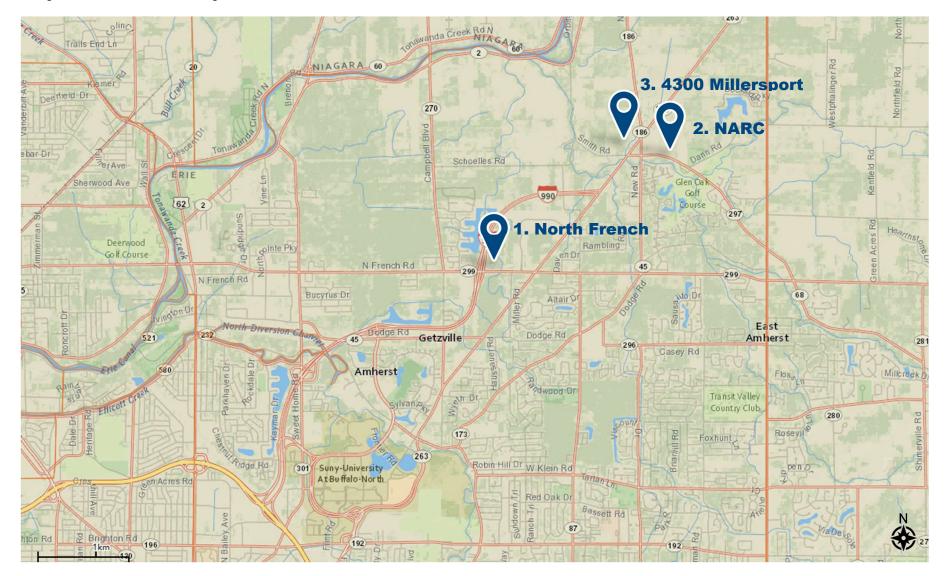
Table 2Overview of Potential Development Sites

Site ID	Address	Parcel ID	Size (acres)	Ownership	Current Use
1. North French	North French & Rte 990	Multiple	Approximately 82 acres	Multiple: SBLC Development Corp (primary); M J Peterson Real Estate LLC; Anthony Cimato; Towart Joel P & Tenbyentir; Jean Trabert	residential homes fronting
2. NARC	550 Smith Road	16.00-4-20.1	62.9 acres	Town of Amherst	North Amherst Recreation Center; partially vacant/undeveloped
3. 4300 Millersport Highway	4300 Millersport Highway	16.00-2-20	66.9 acres	Cimato & Sons	Vacant/undeveloped

Map: Potential Development Sites Proximity to Agriculture Districts



Map: Potential Development Sites



Site 1: North French

Location + Access

The "North French" site is privately owned and its inclusion in this study in no way obligates private owners to pursue a specific development concept. The site (which as previously noted includes several parcels) is located at the Route 990 Interchange with North French Road (Exit 4). The immediate access to the interstate is a desirable feature for most types of agribusiness development, allowing easy transportation of goods to the site and to markets. Interstate 290, which provides access to I-90, is approximately 5.5 miles from the site via I-990.

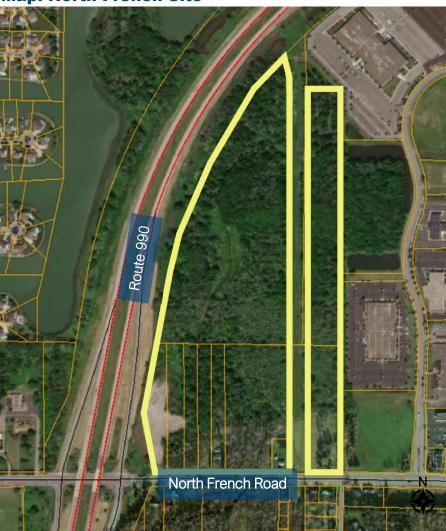
Natural Constraints

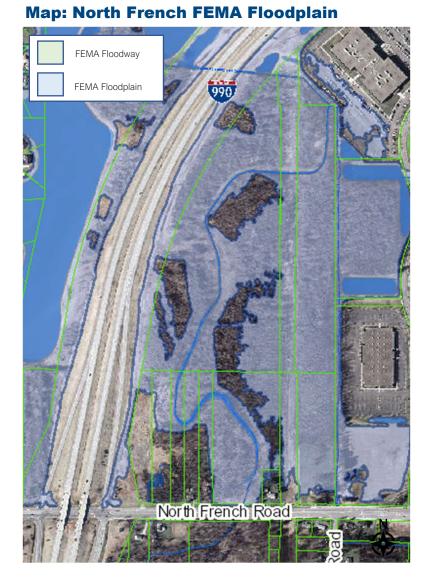
The site features some natural constraints, including designated FEMA floodplain as well as state and federally regulated wetlands. The least constrained area of the site appears to be the southwest corner where there is a potentially developable area fronting on North French Road. Other areas of the site may potentially be developable but will require mitigating these constraints. Note that wetlands are not jurisdictional unless delineated.

Utilities

The site is well served by infrastructure with municipal water and sanitary sewer available along its entire frontage (located within the right-of-way of North French). The water main includes an 8-inch diameter line with sufficient flow and pressure for future development. The sanitary sewer line includes a 36-inch diameter line with sufficient capacity for new development on site (assuming no atypically large service requirements). There is electric service to the site as well.

Map: North French Site





Map: North French Wetlands



Site 2: NARC

Location + Access

The "NARC" site (North Amherst Recreation Center) property is a large town-owned tract including an indoor recreation center, outdoor athletic fields, a community dog park, the town municipal complex, and natural undeveloped areas. The site also includes a parcel at the intersection of New Road and Smith Road. The site is immediately adjacent to Millersport Highway with access to Route 990 approximately 0.8 miles from the site. The site has advantageous interstate highway access located approximately 7 miles from Route 290 and 11 miles from I-90.

Natural Constraints

The site is heavily constrained by designated floodplain and both federally- and state-regulated wetlands. Therefore, agribusiness development may be challenging. Note that wetlands are not jurisdictional unless delineated.

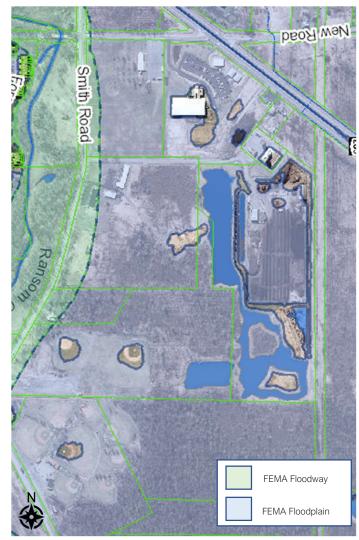
Utilities

Municipal water and sewer are currently available to portions of the site. Sanitary sewer service could relatively easily be extended via a 250-foot extension to the potential development area fronting on Smith Road from the municipal complex. Water supply is available within the right-of-way of Smith Road through an 8-inch waterline.

Map: NARC Site



Map: NARC FEMA Floodplain



Map: NARC Wetlands



Site 3: 4300 Millersport

Location + Access

The property at 4300 Millersport is currently natural undeveloped land. There are proposed residential development plans for a portion of the site; however, and the area available for potential agribusiness development is less than 10 acres. The presence of adjacent residential uses may also limit certain types of uses such as those requiring extensive trucking. Similar to the "NARC" site, which is nearly directly across Millersport Highway from 4300 Millersport, the site has great local access potential with frontage of Smith Road, Millersport Highway, and New Road. Immediate access to Millersport Highway provides great visibility and interstate access to both producers and markets.

Natural Constraints

There is a tributary creek of Ransom Creek that runs through the property and the entirety of the property is designated FEMA floodplain (a very small portion of the property is within the Ransom Creek floodway). However, the property does not feature any state or federally regulated wetland areas. Note that wetlands are not jurisdictional unless delineated.

Utilities

Municipal water is currently available to the site via the Millersport Highway frontage, which features a 10-inch diameter water main with sufficient flow and pressure. There is currently no frontage sanitary sewer in this location, but a developer is in the process of applying to improve this site to also include a sanitary lift station that could potentially serve future agribusiness development.

Map: 4300 Millersport



Map: 4300 Millersport FEMA Floodplain



Map: 4300 Millersport Wetlands



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Site Feasibility Overview

Overall, each of the three sites has development potential for agribusiness use; however, each property also has challenges that will need to be overcome (see Table 3). All three sites have great locational advantages with proximity to local farm producers and to markets through immediate highway interstate connections.

Table 3

Summary: Site Feasibility Assessment

Generally, adequate utilities are available or can reasonably be provided to each of the properties. Note that National Fuel did not respond to requests regarding natural gas availability.

Hydrologic-related constraints, including extensive wetland and floodplain areas, affecting the sites appear to pose the greatest development challenges. Despite these constraints, each has at least portions that are not constrained by regulated wetlands.

	Strengths and Advantages	Challenges and Constraints	Overall Assessment
1. North French	Immediate proximity to Route 990 is ideal for most agribusiness uses. Property has potentially developable land areas unencumbered by floodplain and wetland. Adequate water and sewer availability and capacity.	Significant portions constrained by floodplain and wetland, which will pose challenges for future expansion or large-scale build out of the site. Multiple private owners may pose challenge to site assembly (although current status of assembly unknown).	Overall the site appears to offer locational advantages that would be desirable to potential agribusiness users, and development challenges would not be expected to pose a barrier to future agribusiness development at the property.
2. NARC	Relatively easy access to the interstate highway system via Millersport Highway. Immediate proximity to community/recreation activity an opportunity for agribusiness businesses with retail/entertainment component(s). Public ownership is an opportunity to facilitate desired development outcome(s).	extension through the existing dog park would be required. More significant infrastructure	Wetland and floodplain issues will pose significant challenges; however, an approximately 1.5 acre area fronting on Smith Road appears to have potential being located in FEMA floodplain but not within regulated wetlands. The benefits of public ownership and control may outweigh development challenges, which also include the extension of sewer service.
3. 4300 Millersport Highway	Relatively easy access to the interstate highway system via Millersport Highway. Significant frontage on Millersport highway provides high visibility for potential retail/entertainment components of agribusiness development. Access potential from three roads. No state and federal regulated wetlands on the property. Adequate public water supply.	Sanitary sewer not currently available directly to site (but may be addressed by current property owner/developer). No areas of site are located outside of FEMA designated floodplain area.	The site is very well suited for agribusiness development and its easy access and high visibility are ideal for agribusiness users requiring direct consumer access (e.g., retail). A sanitary sewer solution would be needed for most agribusiness uses.

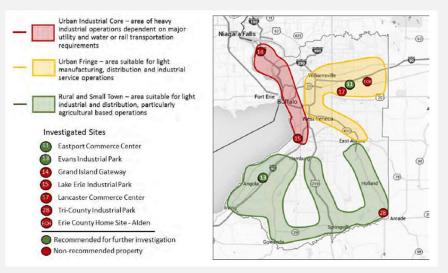
3. Competitive Assessment

This section explores the competitive advantage or disadvantage of the sites with respect to potential alternative locations available for agribusiness facilities. The Erie County Agribusiness Park Feasibility Study (2016) was reviewed as a starting place for the assessment. The study identified three zones in the county where certain types of agribusiness uses were deemed most suitable. While not falling directly within the delineated area, Amherst is closely aligned with the "Urban Fringe" area shown in yellow, which was identified as suitable for light manufacturing, distribution, and industrial service operations.

The "Eastern Urban Fringe" area was identified as being suitable for the six (6) primary market opportunities identified for the Erie County Agribusiness Park, as shown to the right. Several properties were explored for their suitability for an agribusiness park; however, only one suitable site in the northern half of Erie County was selected for further investigation based on its perceived viability for agribusiness development (Eastport Commerce Center). The study also notes that "Erie County appears to lack a sufficient supply of ready sites and building to support industry. This is particularly so for sites and buildings in clean environments suitable for agribusiness operations."

Overall, the Erie County Agribusiness Park Feasibility Study site location analysis suggests that Amherst is located in a generally favorable area for a variety of agribusiness uses and that there are few significant agribusiness industrial development properties available (at the time of the report).

Erie County Agribusiness Park Feasibility Study: Location Analysis



	Erie County Industrial Districts								
Agribusiness Facility	Lakefront Industrial Core	Eastern Urban Fringe	Rural South						
Dry Goods Food Manufacturing	Х	Х	Х						
Fresh Fruit Processing		X	Х						
Refrigerated Food Products		X	Х						
Salad-in-a-Bag		Х							
Hydroponics Vegetables	Х	X	Х						
Distribution Center	Х	Х	Х						

Agribusiness Site Selection Criteria

The Erie County Agribusiness Park Feasibility Study also included an assessment of the County's challenges and opportunities as reported by site selectors. Key challenges included:

- The region's "rustbelt" legacy is still a factor in how outsiders view the region.
- Brownfield industrial sites, including abandoned grain silos, reinforce impressions that the region is not suitable for development.
- Few corporate managers and site selectors are aware of Erie County's broad array of development assets.
- There is a general unfamiliarity with Erie County and who represents economic development interests.
- Severe winter weather is perceived as a serious business risk.

Opportunities identified by site selectors included:

- Abundant utility capacity and transportation infrastructure set the region apart from many parts of the country
- The national trend for agribusiness companies to produce product closer to consumer markets favors Erie County.
- Increased amounts of locally grown produce and diary are creating demand for processing facilities.
- An agribusiness industrial park could be a catalyst for branding Erie County as an "agribusiness friendly" location.

The report also identified key site selection criteria used when agribusiness companies evaluate a community as a potential location. It also provided an assessment of Erie County for each criteria:

• Access to raw materials/markets: Raw material/market access is a strength. A large portion of North American

consumer and industrial markets are within a 500-mile oneday truck drive. Supply chains for numerous industries are well developed within that same 500-mile radius.

- **Transportation Infrastructure:** This is a strength. Highway, rail, water, and airport resources are well developed and support the efficient flow of goods and people.
- Real Estate Portfolio: Erie County appears to lack a sufficient supply of ready sites and building to support industry. This is particularly so for sites and buildings in clean environments suitable for agribusiness operations.
- Utilities/Infrastructure: The urbanized areas of Erie County appear to be well served by water, wastewater, and electric utilities. Natural gas availability is not as clear. Utility services in non-urbanized areas are also not clear.
- Workforce/Training: Erie County's reputation on workforce is tied to Buffalo's rustbelt legacy. The good aspects of this include a belief that the region is home to highly trained machinists and workers skilled in other industrial trades. The negative side of this is that these workers are getting old and skilled workers are not entering the workforce to replace them.
- Business Environment: The region's rustbelt legacy is still a factor in how outsiders view Erie County. Site selectors tie what they know about Buffalo to the County as a whole. Brownfield industrial sites, including abandoned grain silos along the lake, reinforce impressions that the region is an area in decline.

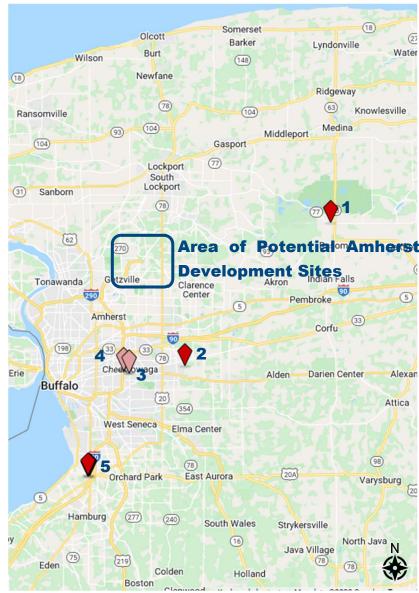
Overall, the three sites offer most of the attributes agribusinesses are looking for in terms of utility infrastructure, highway access, proximity to markets, and relatively unconstrained sites. The most constraining factors include land costs, parcel size, and further distances from concentrations of producers than potential alternative locations.

Available Development Sites

There is a very limited number of available industrial (land) development sites in the immediate Amherst area, particularly within area generally bounded by I-90, 290, and 990. A total of five (5) properties with industrial development potential are currently available in the immediate region. None of these properties are anticipated to be "competitive" properties for agribusiness development in Amherst due to their distance from local agricultural producers. Furthermore, the STAMP site is not geared toward small- to mid-scale agribusiness, making any potential development site in Amherst well-positioned to capitalize on demand potential North of I-90.

1. 6608 Crosby Road,	Size: 850 Acres
Alabama, NY	Description: "Mega site" targeted for
("STAMP"	advanced manufacturing
2. Walter Winter Drive @ Erie Street	Size: 8 Acres Description: Lot located in multi-tenant industrial park
3. 3150 Union Road, Buffalo, NY	Size: 12 Acres Description: Shovel Ready industrial land. Suitable for up to 250,000 SF of development.
4. 2977 Broadway	Size: 15.6 Acres
Street, Cheektowaga,	Description: Located in industrial
NY	district, easy access to I-90
5. Southwestern	Size: 4 parcels totaling 20.8 acres.
Boulevard, Hamburg,	Description: Easy access to I-90.
NY	Offered at \$2.5M.

Map: Available Industrial Development Sites



Source: LoopNet

Regional Agribusiness Parks

Genesee Valley Agri-Business Park | Batavia, NY



Source: Genesee County Economic Development Center

The Park is a 250-acre business park targeted to agribusiness users with major tenants including HP Hood, Upstate Niagara Cooperative, and Marktec Products. The park has a concentration of dairy-related agribusiness companies. It currently has over one million square feet of food and beverage manufacturing development.

According to GCEDC, there are two parcels currently available including a 30-acre site with rail access and a smaller retail parcel. According to Loopnet, there is a \$2 million rail grant available for the 30-acre parcel. The parcel is available for \$2.5 million with subdivision potential.

The Park is an attractive location for major dairy or other regional agribusiness producers with a large footprint; however, the park is not geared towards smaller operations.

Agribusiness Park | Evans, NY (Planned)



Erie County Industrial Development Agency

Plans have been underway for years to develop a 240-acre site in Evans, New York to provide a location for agribusinesses near farmers in the Southtowns. The property is located near the Thruway and close to major rail lines.

A feasibility study conducted for the Park recommended the following market opportunities for an agribusiness park in Erie County:

- Dairy processing
- Organic vegetables/specialty produce
- Controlled environment agriculture
- Transshipment processing
- Canadian food processors

The site would likely outcompete Amherst for major regional enterprises, but its distance from more northern producers suggests there is a potential competitive niche for Amherst.

Agribusiness-Related Real Estate Market

A real estate market analysis scan of countywide market conditions for agribusiness-related real estate types was conducted. Market data available from CoStar was analyzed for refrigeration and cold storage as well as food processing, the two directly related agribusiness real estate categories available.

There is approximately 789,000 square feet of cold storage inventory in Erie County. Cold storage has seen relatively strong demand in the county with positive net absorption of nearly 90,000 square feet from 2015 through 2022 YTD. During this same period, the vacancy rate in cold storage facilities dropped from 9.1% to 0.0%, a strong indication that new cold storage development will be needed to meet future demand.

There are five buildings classified in CoStar as food processing, representing approximately 895,000 square feet of inventory. This indicates that facilities are generally larger scale with an average building footprint of over 100,000 square feet. While no new inventory has been built in the past decade according to CoStar, there has been positive net absorption and food processing facilities currently report no vacancy. It is likely that additional food processing properties, including smaller operations in flex properties, are not tracked by CoStar; however, the data available on food processing-dedicated properties suggests no available inventory and that future demand may require new construction.



Erie County NY Refrigeration & Cold Storage Real Estate Market

Erie County NY Food Processing Real Estate Market Trends



4. Agribusiness Industry Profile and Trends

Introduction

The Agribusiness industry encompasses a broad range of activities, including crop and animal production and forestry, food manufacturing, biofuels and medicine manufacturing, farm machinery manufacturing and sales, agricultural product storage and trucking, produce, meat, and seafood wholesaling and retailing, testing labs, and biotechnology research and development. While there is no standard definition, besides agriculture, agribusinesses are found in industries as diverse as manufacturing, transportation and warehousing, trade, and professional, scientific, and technical services. Some definitions even include restaurants, liquor stores, and commodity contract traders.

Camoin Associates reviewed various definitions of the Agribusiness industry and compiled data on over 120 detailed subsectors. We then evaluated their local presence and degree of concentration, recent performance, and competitive advantage in Erie County and in the broader five-county region of Erie, Niagara, Orleans, Genesee, and Wyoming. Based on these results we focused on four agribusiness clusters: Dairy, Other Value-Add Food Products Manufacturing, Biotech, Horticulture/Controlled Environment.

Local Agricultural Production

As of the 2017 Census of Agriculture there were a total of 14 farm operations in zip codes 14228 and 14051 (see Table 4). These zip codes cover the northwest and northeast corners of the Town and a portion of Clarence. Almost 80% (11) were run by full owners, with the remaining three operated by part owners. These are less than half the amounts seen in 2007, when there were 30 farms in Amherst. At that time, half were run by full owners, 30% were run by part owners, and 20% by tenant farmers. So although the share of local farms operated by full owners has increased, the overall number has declined.

Table 4

Farm Operations by Tenure, Zip Codes 14228 and 14051

Tenure	14228	14051	Combined	Share
Farm Operations: Part Owner3032Farm Operations: Tenant Farmer0000Total (all tenures)861412007Farm Operations: Full Owner69155				
Farm Operations: Full Owner	5	6	11	78.6%
Farm Operations: Part Owner	3	0	3	21.4%
Farm Operations: Tenant Farmer	0	0	0	0.0%
Total (all tenures)	8	6	14	100%
2	2007			
Farm Operations: Full Owner	6	9	15	50.0%
Farm Operations: Part Owner	3	6	9	30.0%
Farm Operations: Tenant Farmer	4	2	6	20.0%
Total (all tenures)	13	17	30	100%
Trends	2007–201	7		
Farm Operations: Full Owner	-16.7%	-33.3%	-26.7%	
All Tenures	-38.5%	-64.7%	-53.3%	

Source: Town of Amherst, NY Farmland Protection Plan

As shown in Table 5, over two-thirds of the farms in 2017 were 50 to 499 acres, with the remainder less than 50 acres. Three-quarters had sales receipts under \$50,000. Twelve percent had sales of \$50,000 to \$249,999 and another 12% had sales over \$250,000.

Table 5

Characteristics of Farms, Zip Codes 14228 and 14051, 2017

Tenure	14228	14051	Combined	Share
Size				
Area Harvested: 1 to 49.9 acres	1	6	7	30.4%
Area Harvested: 50 to 499 acres	7	9	16	69.6%
Total	8	15	23	100.0%
Sales Receipts				
Farm Sales: < \$50,000	4	15	19	76.0%
Farm Sales: \$50,000 to \$249,999	2	1	3	12.0%
Farm Sales: over \$250,000	2	1	3	12.0%
Total	8	17	25	100.0%

Source: Town of Amherst, NY Farmland Protection Plan

Data on what these farms produce indicate a mix of products according to the Farmland Protection Plan:

- Field crops (6)
- Horticulture (5)
- Grain (3)
- Hay and haylage (3)
- Orchards (1)
- Soybeans (1)
- Fruits and nuts (1)

As shown in Table 6, Erie County's primary agricultural products by value of sales in 2017 included:

- Milk: \$46.1 million
- Nursery, greenhouse, floriculture, and sod: \$24.0 million
- Vegetables, melons, potatoes, and sweet potatoes: \$12.5 million

- Other crops and hay: \$10.3 million
- Corn: \$7.8 million

These five commodity groups accounted for 77% of total farm sales.

Across the neighboring counties of Genesee, Niagara, Orleans, and Wyoming, milk, vegetables, melons, potatoes, and sweet potatoes, corn, and other crops and hay feature prominently as key agricultural products. A detailed table is provided on the following page.

The value of farm sales increased across the region between 2012 and 2017, after adjusting for inflation. Growth in total sales ranged from 15% in Niagara and Wyoming counties to 23% in Orleans. In Erie, sales of vegetables, melons, potatoes, and sweet potatoes grew by 26% and sales of milk grew by 10%. Nursery, greenhouse, floriculture, and sod sales declined slightly, but by only 1%.

Table 6 Key Agricultural Products by County

		2017		2012		2012–2017
County	Product	Sales	Share	Sales	Share	Sales Change
Erie	Milk	\$46,115,000	35.2%	\$42,029,336	37.6%	10%
	Nursery, greenhouse, floriculture, and sod	\$24,045,000	18.4%	\$24,232,177	21.7%	-1%
	Vegetables, melons, potatoes, and sweet potatoes	\$12,536,000	9.6%	\$9,930,738	8.9%	26%
	Other crops and hay	\$10,313,000	7.9%	(D)	_	_
	Corn	\$7,824,000	6.0%	\$7,811,788	7.0%	0%
	Total Commodities	\$130,973,000	100%	\$111,911,807	100%	17%
Genesee	Milk	\$114,101,000	48.6%	\$101,994,517	51.2%	12%
	Vegetables, melons, potatoes, and sweet potatoes	\$43,166,000	18.4%	\$29,550,143	14.8%	46%
	Corn	\$18,319,000	7.8%	\$24,781,036	12.4%	-26%
	Soybeans	\$6,146,000	2.6%	\$5,985,339	3.0%	3%
	Other crops and hay	\$5,916,000	2.5%	\$6,042,495	3.0%	-2%
	Total Commodities	\$234,935,000	100%	\$199,162,772	100%	18%
Niagara	Milk	\$37,424,000	31.6%	\$33,265,239	32.3%	13%
	Fruits and tree nuts (excluding berries)	\$25,375,000	21.4%	\$12,685,961	12.3%	100%
	Corn	\$16,125,000	13.6%	\$19,625,289	19.0%	-18%
	Vegetables, melons, potatoes, and sweet potatoes	\$13,795,000	11.6%	\$12,922,146	12.5%	7%
	Other crops and hay	\$8,005,000	6.7%	\$4,443,826	4.3%	80%
	Soybeans	\$6,600,000	5.6%	\$6,796,441	6.6%	-3%
	Total Commodities	\$118,617,000	100%	\$103,110,727	100%	15%
Orleans	Vegetables, melons, potatoes, and sweet potatoes	\$39,850,000	25.7%	\$32,627,285	25.8%	22%
	Fruits and tree nuts (excluding berries)	\$35,797,000	23.1%	\$23,632,886	18.7%	51%
	Corn	\$22,540,000	14.5%	\$35,434,620	28.0%	-36%
	Milk	\$16,754,000	10.8%	\$7,387,326	5.8%	127%
	Soybeans	\$9,941,000	6.4%	\$9,436,512	7.5%	5%
	Total Commodities	\$155,282,000	100%	\$126,349,410	100%	23%
Wyoming	Milk	\$201,447,000	65.5%	\$167,402,903	62.5%	20%
	Cattle and calves	\$40,227,000	13.1%	\$34,325,135	12.8%	17%
	Corn	\$22,606,000	7.4%	\$23,457,218	8.8%	-4%
	Vegetables, melons, potatoes, and sweet potatoes	\$20,596,000	6.7%	\$21,682,041	8.1%	-5%
	Other crops and hay	\$15,444,000	5.0%	\$14,516,612	5.4%	6%
	Total Commodities	\$307,521,000	100%	\$267,709,657	100%	15%

Note: 2012 amounts have been adjusted to 2017 dollars using the Producer Price Index for farm products.

(D): Not disclosed to protect individual farm data

Source: 2017 Census of Agriculture

Agribusiness Industry Trends

This section examines recent economic trends in various agribusiness sectors, including:

- Food agriculture
- Food processing
- Nonfood agriculture
- Fertilizer and pesticides
- Machinery, equipment, and supplies
- Food distribution

Trends were analyzed for Erie County and a broader 5-county region. The analysis includes the number of jobs in each industry sector and growth rates. It also includes two other industry performance metrics including Location Quotient (LQ) and Competitive Effect. These are defined as follows:

- Location Quotient (LQs) measure the concentration of an industry in a local area compared with a reference region, in this case the United States. They are calculated as an industry's share of total employment in the local region (i.e., Erie County or the five-county region) divided by the industry's share of total employment in the nation as a whole. Values greater than one indicate there may be some local specialization in the industry and it has potential to be an export industry.
- Competitive Effect measures how much of an industry's job change over a given period is due to a unique competitive advantage of the region. It captures the job change that cannot be explained by broad national trends or national industry-specific trends.

Food Agriculture

Veterinary Services is the largest subsector of Food Agriculture in Erie County, providing 1,633 jobs in 2021. It is also the most concentrated subsector, with an employment share (indicated by the 2021 LQ) 1.3 times the national average, and the fastest growing, increasing by 28% and 362 jobs between 2016 and 2021.

The next largest subsector is Animal Production, with 668 jobs in 2021. This sector was also the second fastest growing, expanding by 26% and 138 jobs between 2016 and 2021. Crop Production follows close behind in size with 648 jobs, although it shrank by 5% over the five-year period, losing 38 jobs.

In the five-county region, Animal Production is the largest and most concentrated Food Agriculture subsector, with 3,345 jobs in 2021 and a share of regional employment 1.8 times the national average. While not the fastest-growing sector, it did add 247 jobs between 2016 and 2021, for an 8% gain.

The fastest-growing sector in the region is Veterinary Services, expanding 23% from 2016 to 2021 to reach 2,070 jobs. It is also relatively concentrated, with an employment share 1.3 times the national average.

Crop Production is the second-largest subsector in the region, providing 2,800 jobs in 2021. However, it saw the largest decline, shrinking by 16% from 2016 and shedding 541 jobs.

Table 7 provides details.

Table 7

Food Agriculture

				ERIE (OUNTY				FIVE-COUN	ITY REGION	
						2016–21					2016–21
		2021	2021	2016–21	2016–21	Competitive	2021	2021	2016–21	2016–21	Competitive
NAICS	Description	Jobs	LQ	Change	% Change	Effect	Jobs	LQ	Change	% Change	Effect
111000	Crop Production	648	0.3	(38)	-5%	(21)	2,800	0.9	(541)	-16%	(459)
112000	Animal Production	668	0.5	138	26%	82	3,345	1.8	247	8%	(75)
114111	Finfish Fishing	<10	0.0	Insf. Data	Insf. Data	(1)	<10	0.1	Insf. Data	Insf. Data	(6)
114112	Shellfish Fishing	<10	0.1	Insf. Data	Insf. Data	(1)	<10	0.1	Insf. Data	Insf. Data	(2)
114119	Other Marine Fishing	0	0.0	0	0%	0	0	0.0	0	0%	0
115111	Cotton Ginning	0	0.0	0	0%	0	0	0.0	0	0%	0
115112	Soil Preparation, Planting, and Cultivating	10	0.1	Insf. Data	Insf. Data	7	19	0.1	2	12%	2
115113	Crop Harvesting, Primarily by Machine	0	0.0	0	0%	0	<10	0.0	Insf. Data	Insf. Data	1
115114	Postharvest Crop Activities (except Cotton Ginning)	<10	0.0	Insf. Data	Insf. Data	0	309	1.0	45	17%	57
115115	Farm Labor Contractors and Crew Leaders	83	0.1	5	6%	6	348	0.3	3	1%	6
115116	Farm Management Services	0	0.0	0	0%	0	0	0.0	0	0%	0
115210	Support Activities for Animal Production	53	0.4	7	16%	4	103	0.6	(1)	-1%	(8)
541940	Veterinary Services	1,633	1.3	362	28%	119	2,070	1.3	387	23%	67

Source: Emsi

Food Processing

As shown in Table 8, the largest component of the Food Processing sector, in both Erie County and the five-county region, is Fluid Milk Manufacturing. It provides 1,061 jobs in Erie County and 1,318 in the region, indicating that Erie is the regional center for Fluid Milk Manufacturing. While not the highest concentrations, Fluid Milk manufacturing accounts for shares of total county and regional employment 6.9 and 6.8 times the national average, respectively.

The most highly concentrated subsector within Food Processing is Flour Milling, with county and regional employment shares 12.7 and 10.0 times the national average, respectively. Ice Cream and Frozen Dessert Manufacturing is also highly concentrated in Erie and the five counties, with employment shares 12.0 and 9.5 times the national average, respectively. It is the second-largest and fastest-growing subsector, increasing employment by 126% between 2016 and 2021. All of the region's 782 Ice Cream and Frozen Dessert Manufacturing jobs are in Erie County.

Breweries and Cookie and Cracker Manufacturing are also growing rapidly, in both Erie County and the five-county region. Brewery employment expanded by 74% in Erie and doubled in the region between 2016 and 2021. Cookie and Cracker Manufacturing jobs grew by 26% and 82%, respectively, over the same period.

Table 8

Food Processing

				ERIE C	OUNTY				FIVE-COUN	ITY REGION	
						2016–21					2016–21
		2021	2021	2016–21	2016–21	Competitive	2021	2021		2016–21	Competitive
NAICS	Description	Jobs	LQ		% Change	Effect	Jobs	LQ		% Change	Effect
311111	Dog and Cat Food Manufacturing	144	1.6	(47)	-25%	(94)	144	1.3	(55)	-28%	(104)
311119	Other Animal Food Manufacturing	<10	0.0	Insf. Data	Insf. Data	(1)	155	1.2	(49)	-24%	(58)
311211	Flour Milling	530	12.7	40	8%	13	530	10.0	40	8%	13
311212	Rice Milling	0	0.0	0	0%	0	0	0.0	0	0%	0
311213	Malt Manufacturing	0	0.0	(17)	-100%	(18)	20	4.2	2	14%	2
311221	Wet Corn Milling and Starch Manufacturing	0	0.0	0	0%	0	0	0.0	0	0%	0
311224	Soybean and Other Oilseed Processing	0	0.0	0	0%	0	0	0.0	0	0%	0
311225	Fats and Oils Refining and Blending	0	0.0	0	0%	0	0	0.0	0	0%	0
311230	Breakfast Cereal Manufacturing	<10	0.1	Insf. Data	Insf. Data	5	<10	0.1	Insf. Data	Insf. Data	5
311313	Beet Sugar Manufacturing	0	0.0	0	0%	0	0	0.0	0	0%	0
311314	Cane Sugar Manufacturing	0	0.0	0	0%	0	0	0.0	0	0%	0
311340	Nonchocolate Confectionery Manufacturing	83	1.3	(86)	-51%	(98)	83	1.0	(86)	-51%	(98)
311351	Chocolate and Confectionery Manufacturing from Cacao Beans	16	0.6	16	0%	15	21	0.6	21	Insf. Data	21
311352	Confectionery Manufacturing from Purchased Chocolate	318	3.7	50	19%	64	319	2.9	26	9%	42
311411	Frozen Fruit, Juice, and Vegetable Manufacturing	0	0.0	0	0%	0	62	0.6	(8)	-11%	(4)
311412	Frozen Specialty Food Manufacturing	510	2.8	(36)	-7%	(85)	524	2.3	(34)	-6%	(85)
311421	Fruit and Vegetable Canning	27	0.2	(6)	-17%	(4)	46	0.2	(67)	-59%	(61)
311422	Specialty Canning	0	0.0	0	0%	0	0	0.0	0	0%	0
311423	Dried and Dehydrated Food Manufacturing	0	0.0	0	0%	0	<10	0.1	Insf. Data	Insf. Data	(49)
311511	Fluid Milk Manufacturing	1,061	6.9	148	16%	170	1,318	6.8	195	17%	222
311512	Creamery Butter Manufacturing	. 0	0.0	0	0%	0	0	0.0	0	0%	0
311513	Cheese Manufacturing	132	0.8	(267)	-67%	(362)	437	2.1	(141)	-24%	(279)
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	23	0.4	(64)	-74%	(75)	418	6.2	131	46%	94
311520	Ice Cream and Frozen Dessert Manufacturing	782	12.0	435	126%	415	782	9.5	435	126%	415
311611	Animal (except Poultry) Slaughtering	<10	0.0	Insf. Data	Insf. Data	(5)	11	0.0	(17)	-62%	(19)
311612	Meat Processed from Carcasses	224	0.6	10	4%	(18)	224	0.4	4	2%	(24)
311613	Rendering and Meat Byproduct Processing	<10	0.0	Insf. Data	Insf. Data	(0)	<10	0.0	Insf. Data	Insf. Data	(0)
311615	Poultry Processing	<10	0.0	Insf. Data	Insf. Data	0	<10	0.0	Insf. Data	Insf. Data	(1)

Table 8 Food Processing (continued)

				ERIE C	IE COUNTY FIVE-COUNTY REGION				Å.		
						2016–21					2016–21
		2021	2021	2016–21	2016–21	Competitive	2021	2021	2016–21	2016–21	Competitive
NAICS	Description	Jobs	LQ	Change	% Change	Effect	Jobs	LQ	Change	% Change	Effect
311710	Seafood Product Preparation and Packaging	<10	0.0	Insf. Data	Insf. Data	1	<10	0.0	Insf. Data	Insf. Data	1
311811	Retail Bakeries	174	0.6	(5)	-3%	(10)	233	0.6	(11)	-4%	(17)
311812	Commercial Bakeries	260	0.7	(42)	-14%	(29)	430	0.9	(113)	-21%	(91)
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	98	2.8	(4)	-4%	1	98	2.2	(4)	-4%	1
311821	Cookie and Cracker Manufacturing	230	2.3	47	26%	47	345	2.7	156	82%	156
311824	Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	<10	0.1	Insf. Data	Insf. Data	(17)	<10	0.1	Insf. Data	Insf. Data	(17)
311830	Tortilla Manufacturing	0	0.0	Insf. Data	Insf. Data	(0)	0	0.0	Insf. Data	Insf. Data	(0)
311911	Roasted Nuts and Peanut Butter Manufacturing	<10	0.0	Insf. Data	Insf. Data	2	<10	0.0	Insf. Data	Insf. Data	2
311919	Other Snack Food Manufacturing	0	0.0	0	0%	0	0	0.0	0	0%	0
311920	Coffee and Tea Manufacturing	40	0.6	(39)	-49%	(49)	44	0.5	(35)	-45%	(46)
311930	Flavoring Syrup and Concentrate Manufacturing	98	4.3	Insf. Data	Insf. Data	92	98	3.4	Insf. Data	Insf. Data	92
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing	<10	0.0	Insf. Data	Insf. Data	(28)	<10	0.1	Insf. Data	Insf. Data	(146)
311942	Spice and Extract Manufacturing	0	0.0	0	0%	0	50	0.5	(60)	-55%	(72)
311991	Perishable Prepared Food Manufacturing	74	0.4	(40)	-35%	(60)	75	0.4	(40)	-35%	(59)
311999	All Other Miscellaneous Food Manufacturing	22	0.2	Insf. Data	Insf. Data	21	298	2.2	50	20%	11
312120	Breweries	209	0.8	89	74%	37	406	1.3	205	102%	118
312130	Wineries	<10	0.1	Insf. Data	Insf. Data	9	79	0.3	(12)	-14%	(21)
312140	Distilleries	38	0.7	5	14%	(15)	38	0.5	5	14%	(15)

Nonfood Agriculture

The largest component of the Nonfood Agriculture sector in Erie County and the five-county region is Biological Product (except Diagnostic) Manufacturing. It dominates the sector with 1,032 jobs, all of which are in Erie County. It is also the most highly concentrated subsector, with county and regional employment shares 9.1 and 7.1

Table 9

Nonfood Agriculture

times the national average, respectively. And it is the fastest-growing sector, increasing employment by 68% between 2016 and 2021.

The next fastest-growing sector in Erie County is Flower, Nursery Stock, and Florists' Supplies Wholesalers, which expanded by 56%. Regional employment in Biofuels not made in petroleum refineries and not blended with petroleum grew by 72% between 2016 and 2021.

		ERIE COUNTY FIVE-COUNTY REGION									
						2016–21					2016–21
		2021	2021	2016–21	2016–21	Competitive	2021	2021	2016–21	2016–21	Competitive
NAICS	Description	Jobs	LQ	Change	% Change	Effect	Jobs	LQ	Change	% Change	Effect
113110	Timber Tract Operations	0	0.0	0	0%	0	0	0.0	0	0%	0
113210	Forest Nurseries and Gathering of Forest Products	0	0.0	0	0%	0	0	0.0	0	0%	0
113310	Logging	28	0.1	3	13%	5	64	0.3	5	8%	9
114210	Hunting and Trapping	<10	0.1	Insf. Data	Insf. Data	(3)	<10	0.2	Insf. Data	Insf. Data	(5)
115310	Support Activities for Forestry	<10	0.1	Insf. Data	Insf. Data	0	<10	0.1	Insf. Data	Insf. Data	1
312230	Tobacco Manufacturing	0	0.0	0	0%	0	18	0.5	(57)	-76%	(46)
313110	Fiber, Yarn, and Thread Mills	0	0.0	0	0%	0	0	0.0	0	0%	0
316110	Leather and Hide Tanning and Finishing	0	0.0	0	0%	0	0	0.0	Insf. Data	Insf. Data	(3)
321113	Sawmills	23	0.1	(17)	-42%	(15)	46	0.2	(9)	-17%	(7)
321114	Wood Preservation	<10	0.1	Insf. Data	Insf. Data	0	<10	0.1	Insf. Data	Insf. Data	0
324199	Biofuels not made in petroleum refineries and blended with purchased refined petroleum	0	0.0	(105)	-100%	(95)	0	0.0	(105)	-100%	(95)
325193	Ethyl Alcohol Manufacturing	0	0.0	0	0%	0	51	1.4	Insf. Data	Insf. Data	49
325194	Cyclic Crude, Intermediate, and Gum and Wood Chemical Manufacturing	0		0	0%	0	0	0.0	0	0%	0
325199	Biofuels not made in petroleum refineries and not blended with petroleum	20	0.2	20	0%	20	379	2.6	159	72%	148
325411	Medicinal and Botanical Manufacturing	13	0.1	13	0%	12	14	0.1	14	Insf. Data	13
325414	Biological Product (except Diagnostic) Manufacturing	1,032	9.1	418	68%	263	1,032	7.1	418	68%	263
424690	Biofuels, not blended with petroleum, merchant wholesalers	235	0.7	21	10%	4	291	0.7	(12)	-4%	(37)
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	27	0.2	10	56%	9	27	0.2	10	56%	9
453110	Florists	217	1.1	(110)	-34%	(74)	313	1.2	(103)	-25%	(57)

Fertilizer and Pesticides

The Fertilizer and Pesticides agribusiness sector is not well represented in Erie County or the five-county region. At most there were fewer than 10 jobs in the Fertilizer (Mixing Only) Manufacturing and Compost Manufacturing subsectors, representing employment shares just two-tenths of the national average.

Table 10

Fertilizer and Pesticides

		ERIE COUNTY FIVE-COUNTY								TY REGION		
						2016–21					2016–21	
		2021	2021	2016–21	2016–21	Competitive	2021	2021	2016–21	2016–21	Competitive	
NAICS	Description	Jobs	LQ	Change	% Change	Effect	Jobs	LQ	Change	% Change	Effect	
325311	Nitrogenous Fertilizer Manufacturing	0	0.0	0	0%	0	0	0.0	0	0%	0	
325312	Phosphatic Fertilizer Manufacturing	0	0.0	0	0%	0	0	0.0	0	0%	0	
325314	Fertilizer (Mixing Only) Manufacturing	<10	0.2	Insf. Data	Insf. Data	(0)	<10	0.2	Insf. Data	Insf. Data	(1)	
325314	Compost Manufacturing	<10	0.2	Insf. Data	Insf. Data	(0)	<10	0.2	Insf. Data	Insf. Data	(1)	
325320	Pesticide and Other Agricultural Chemical	0	0.0	0	00/	0	<10	0.0	Insf. Data	Incf Data	(0)	
	Manufacturing	0	0.0	0	0%	0	< 10	0.0	insi. Dala	Insf. Data	(0)	

Table 11 Machinery, Equipment, and Supplies

				ERIE (COUNTY		FIVE-COUNTY REGION					
						2016–21					2016–21	
		2021	2021	2016–21	2016–21	Competitive	2021	2021	2016–21	2016–21	Competitive	
NAICS	Description	Jobs	LQ	Change	% Change	Effect	Jobs	LQ	Change	% Change	Effect	
333111	Farm Machinery and Equipment Manufacturing	13	0.1	Insf. Data	Insf. Data	9	151	0.7	12	9%	12	
423820	Farm Machinery and Equipment Merchant Wholesalers	55	0.2	7	14%	6	281	0.7	26	10%	18	
424910	Farm Supplies Merchant Wholesalers	35	0.1	(4)	-10%	(4)	84	0.2	(10)	-10%	(11)	
454390	Nursery, Garden Center, and Farm Supply Retailers	355	1.1	(76)	-18%	(27)	456	1.1	(112)	-20%	(47)	
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	227	1.0	42	23%	16	258	0.9	(11)	-4%	(49)	

Source: Emsi

Machinery, Equipment, and Supplies

Within the Machinery, Equipment, and Supplies sector Nursery, Garden Center, and Farm Supply Retailers provide the most jobs, with 355 in Erie County and 456 in the five-county region. This subsector is also the most highly concentrated, though its county and regional employment shares are just 1.1 times the national average. The fastest-growing subsector in Erie County is Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing, which expanded by 23% between 2016 and 2021. In the five-county region, employment at Farm Machinery and Equipment Merchant Wholesalers grew by 10% over the same period.

Food Distribution

As shown in Table 12, within the Food Distribution agribusiness sector, the largest subsectors by far are Full-Service Restaurants, Limited-Service Restaurants, and Supermarkets and Other Grocery Retailers. In Erie County these three subsectors provide 12,136, 11,466, and 10,547 jobs, respectively; in the five-county region they provide 15,592, 14,984, and 13,110 jobs. All three subsectors lost

jobs between 2016 and 2021, both in Erie and across the region. Note that the COVID-19 pandemic and official responses to it occurred during this timeframe and may have contributed to these declines.

Fruit and Vegetable Retailers have a relatively strong presence in the county and the region, with employment shares 2.32 and 2.17 times the national average. The subsector exhibited modest job growth of 8% between 2016 and 2021 in Erie County but shrank 6% regionwide.

The fastest-growing component of Food Distribution was Baked Goods Retailers in Erie County, which expanded by 26% between 2016 and 2021, an increase of 12 jobs. Beer, Wine, and Liquor Retailers grew 18% over the same period, adding 134 jobs. In the five-county region, employment at Livestock Merchant Wholesalers doubled to 29 jobs. Beer, Wine, and Liquor Retailers were again the second-fastest-growing subsector, increasing 14% with 128 new jobs over the period.

Table 12 Food Distribution

4/4430	Description	2021			ERIE COUNTY 2016–21						
424430	Description		2021	2016–21	2016 21	2016–21 Competitive	2021	2021	2016 21	2016 21	2016–21 Competitive
424430		Jobs	LQ		% Change	Effect	Jobs	LQ		% Change	Effect
4/4430	Dairy Product (except Dried or Canned) Merchant								, i i i i i i i i i i i i i i i i i i i	, j	
	Wholesalers	26	0.3	(9)	-26%	(2)	28	0.2	(45)	-62%	(31)
424440	Poultry and Poultry Product Merchant Wholesalers	0	0.0	(59)	-100%	(63)	0	0.0	(59)	-100%	(63)
424460	Fish and Seafood Merchant Wholesalers	20	0.3	(15)	-43%	(14)	20	0.2	(15)	-43%	(14)
424470	Meat and Meat Product Merchant Wholesalers	30	0.2	(0)	-1%	(1)	35	0.2	4	14%	4
424480	Fresh Fruit and Vegetable Merchant Wholesalers	201	0.8	4	2%	19	264	0.8	(8)	-3%	13
424510	Grain and Field Bean Merchant Wholesalers	<10	0.0	Insf. Data	Insf. Data	1	<10	0.0	Insf. Data	Insf. Data	(0)
424520	Livestock Merchant Wholesalers	0	0.0	0	0%	0	29	0.5	15	100%	16
424590	Raw Farm Products (except field beans, grains) Merchant Wholesalers	<10	0.0	Insf. Data	Insf. Data	(13)	14	0.3	(5)	-28%	(13)
424810	Beer and Ale Merchant Wholesalers	421	1.3	(178)	-30%	(175)	557	1.4	(189)	-25%	(186)
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers	88	0.3	(18)	-17%	(23)	89	0.3	(27)	-23%	(32)
445110	Supermarkets and Other Grocery Retailers (except Convenience Retailers)	10,547	1.4	(222)	-2%	(510)	13,110	1.4	(319)	-2%	(678)
	Convenience Retailers	863	1.8	(51)	-6%	(48)	1,146	1.9	(37)	-3%	(33)
445210	Meat Retailers	221	1.3	(53)	-19%	(79)	347	1.6	(9)	-3%	(43)
445220	Fish and Seafood Retailers	16	0.4	(29)	-64%	(29)	18	0.3	(28)	-61%	(28)
445230	Fruit and Vegetable Retailers	253	2.3	20	8%	53	300	2.2	(18)	-6%	27
445291	Baked Goods Retailers	57	0.9	12	26%	18	103	1.3	10	11%	23
	Confectionery and Nut Retailers	77	1.3	(38)	-33%	(13)	89	1.2	(33)	-27%	(6)
	All Other Specialty Food Retailers	355	1.1	(76)	-18%	(27)	456	1.1	(112)	-20%	(47)
	Beer, Wine, and Liguor Retailers	864	1.7	134	18%	89	1,021	1.6	128	14%	72
	Pet and Pet Supplies Retailers	466	1.3	2	0%	2	538	1.2	(309)	-36%	(307)
	Food Service Contractors	1,507	1.3	(2,144)	-59%	(1,208)	1,711	1.2	(2,243)	-57%	(1,229)
	Caterers	422	1.0	(394)	-48%	(107)	506	1.0	(391)	-44%	(75)
	Mobile Food Services	108	0.7	(81)	-43%	(130)	146	0.7	(90)	-38%	(150)
	Full-Service Restaurants	12,136	1.0	(5,733)	-32%	(1,818)	15,592	1.0	(6,718)	-30%	(1,830)
	Limited-Service Restaurants	11,466	0.9	(745)	-6%	(627)	14,984	1.0	(802)	-5%	(650)
	Cafeterias, Grill Buffets, and Buffets	66	0.3	(94)	-59%	(22)	112	0.5	(186)	-63%	(51)
	Snack and Nonalcoholic Beverage Bars	2,597	1.2	(1,111)	-30%	(1,737)	3,334	1.2	(1,024)	-23%	(1,760)
484220	Specialized Freight Trucking, local (incl. Agricultural Products Trucking)	447	0.7	(128)	-22%	(138)	653	0.8	(115)	-15%	(129)
484230	Specialized Freight Trucking, long-distance (incl. Agricultural Products Trucking)	364	0.9	(226)	-38%	(206)	484	1.0	(220)	-31%	(196)
	Farm Product Warehousing and Storage	0	0.0	Insf. Data	Insf. Data	(4)	0	0.0	Insf. Data	Insf. Data	(4)

NYS Hemp Industry

According to Richard Ball, Commissioner of the New York State Department of Agriculture and Markets, "New York State first approved the growing of hemp in 2014. In 2016, the first hemp crop in more than 80 years was planted in New York, but the Industrial Hemp Agricultural Research Pilot Program at that time statutorily limited production to 10 growers. By 2017, in recognition of the potential of hemp as an agricultural crop in New York, the limit on the number of hemp grower authorizations was lifted. Today, New York State has more than 800 authorized growers in the program and over 30,000 acres approved for growing hemp."

According to the USDA's National Hemp Report, released in February 2022, New York had 900 acres of industrial hemp planted in 2021, of which 310 acres were harvested. The State represents 1.7% of the country's total area planted and 0.9% of the total area harvested. Of the harvest area, 290 acres were floral hemp grown in the open, yielding a total of 110,000 pounds. Only 45,000 pounds were utilized and had a value of \$2.4 million.

New York also grew over 1.1 million square feet of industrial hemp under protection (e.g., in greenhouses), representing 7.2% of the US total. This included 12,549 pounds of floral hemp, of which 10,579 pounds were utilized at a value of \$3.2 million.

Industrial hemp must not contain more than 0.3% THC by dry weight. Because of this, industrial hemp production requires laboratory testing to verify it has an acceptable THC concentration. Floral industrial hemp is used for the extraction of essential oils from plant resin, such as cannabidiol (CBD), cannabigerol (CBG), cannabinol (CBN), or other phytocannabinoids. Floral hemp includes smokable hemp. Cannabis production for medicinal or recreational use is hindered by uncertainty stemming from its federal status as a Schedule I controlled substance. However, as states, including New York, proceed with legalization of medicinal and recreational use, each is establishing regulatory guidelines for its own in-state producers. The New York State Department of Agriculture and Markets released the *New York State Hemp Plan* in October 2021. This document governs the production and testing of industrial hemp in the state. The *Marihuana Regulation & Taxation Act* was signed into state law in March 2021. The legislation created a new Office of Cannabis Management (OCM) governed by a Cannabis Control Board, to comprehensively regulate adult-use, medical, and hemp cannabis. While some regulations to implement the law have been released, others are still being developed.

Based on the research conducted, it appears that the hemp/cannabis agribusiness sector is an emerging sector with substantial long-term potential. However, it is unclear whether there is an immediate opportunity for Amherst. Future growth in this sector would support the market viability of "indoor farming" discussed as an opportunity later in this study.

5. Agribusiness Supply Chain Opportunity Analysis

Camoin Associates has analyzed agribusiness supply chain data for the region. Camoin subscribes to leading economic data provider Economic Modeling Specialists Intl. (Emsi), which includes tools that measure the share of demand met by imports and the degree of competitive advantage a region has in a given industry.

Camoin Associates selected detailed agribusiness subsectors based on relative concentration in Erie County, recent growth, and local competitive advantage. These formed the basis of the clusters presented below. Among those identified as particularly strong subsectors in the county were:

- Fluid Milk Manufacturing
- Ice Cream and Frozen Dessert Manufacturing
- Flavoring Syrup and Concentrate Manufacturing
- Confectionery Manufacturing from Purchased Chocolate
- Flour Milling
- Cookie and Cracker Manufacturers
- Biological Product (except Diagnostic) Manufacturing

These subsectors all have employment shares that are at least twice the national average and 2016–2021 growth rates of 8% or more. Erie County also has a competitive advantage in each of these sectors, performing above national trends. These subsectors were grouped into the Dairy, Other Value-Add Food Products Manufacturing, and Biotechnology clusters and added similar subsectors with a presence in the county to each cluster. We also created a Horticulture/Controlled Environment cluster. Emsi does not provide data at the same level of detail for this cluster's component subsectors, so we used data from the Census of Agriculture and from the US Bureau of Labor Statistics to develop a profile.

For these clusters we analyze recent and projected performance, including local competitive advantages, presence in Erie County, supply chain opportunities, and key success factors. The supply chain analysis considers opportunities for local suppliers to replace imports to serve local demand and the potential to expand exports.

Dairy

Description, Performance, and Outlook

The Dairy cluster comprises five specific industries: Fluid Milk Manufacturing; Cheese Manufacturing; Dry, Condensed, and Evaporated Dairy Product Manufacturing; Ice Cream and Frozen Dessert Manufacturing; and Dairy Product (except Dried or Canned) Merchant Wholesalers. The cluster provided 2,024 jobs in Erie County in 2021, an increase of 14% from 2016. It is expected to grow by another 12% by 2026, for a net gain of 244 jobs. In contrast, countywide employment shrank almost 8% from 2016 to 2021 and is forecast to shrink a further 1% by 2026. Fluid Milk Manufacturing is by far the largest component industry, with 1,061 jobs in 2021, more than half of the cluster. The fast-growing Ice Cream and Frozen Dessert Manufacturing is the second largest industry, with 782 jobs in 2021, an increase of 126% from 2016. It is expected to grow another 26% by 2026. The other three component industries in the cluster all lost jobs from 2016 to 2021 and are expected to continue to shrink through 2026.

Sixty percent of the cluster's 2016–2021 job growth (146 of 242 new jobs) was due to the county's competitive advantage in the Dairy cluster. This arises from the county's significant concentrations in Fluid Milk Manufacturing and Ice Cream and Frozen Dessert Manufacturing, with employment shares seven and 12 times the national average, respectively.

Roughly one-third of demand for the cluster's output was met by imports, indicating that it is able to satisfy most of the local demand. However, there could be room for additional Dry, Condensed, and Evaporated Dairy Product Manufacturers and Dairy Product (except Dried and Canned) Merchant Wholesalers to substitute for imports. Conversely, Ice Cream and Frozen Dessert, Cheese, and Fluid Milk manufacturers all have strong local market shares.

Nearly 80% of Dairy cluster sales are to customers outside the county, mostly fluid milk and ice cream. There may be opportunities for Cheese; Dry, Condensed, and Evaporated Dairy Product Manufacturers; and Dairy Product Wholesalers to expand their sales outside the county. In general, the Dairy cluster is an export industry that brings new money into Erie County.

Table 13

-		2021	2016-2021	l Change	Competitive	2026	2021–202	6 Change
NAICS	Description	Jobs	Absolute	Relative	Effect	Jobs	Absolute	Relative
311511	Fluid Milk Manufacturing	1,061	148	16%	170	1,198	136	13%
311513	Cheese Manufacturing	132	(267)	(67%)	(362)	54	(77)	(59%)
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	23	(64)	(74%)	(75)	<10	Insf. Data	Insf. Data
311520	Ice Cream and Frozen Dessert Manufacturing	782	435	126%	415	986	205	26%
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers	26	(9)	(26%)	(2)	21	(6)	(22%)
Total		2,024	242	14%	146	2,269	244	12%

Erie County Dairy Cluster Performance and Outlook

Table 14

Erie County Dairy Cluster Supply Chain Opportunities

		2021 Deman	d Met	2021	
		by Impor	Exported Sales		
NAICS	Description	Amount	Share	Amount	Share
311511	Fluid Milk Manufacturing	\$35,536,427	28%	\$669,297,328	88%
311513	Cheese Manufacturing	\$40,988,863	27%	\$37,052,880	25%
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	\$44,404,107	55%	\$16,861,220	32%
311520	Ice Cream and Frozen Dessert Manufacturing	\$3,051,580	10%	\$323,511,982	90%
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers	\$12,718,629	64%	\$1,016,996	12%
Total		\$136,699,605	34%	\$1,047,740,406	79%
Courses					

Source: Emsi

Industry Presence in Erie County

The Dairy cluster represents about 0.4% of total jobs in Erie County in 2021. The New York State Department of Labor reports five dairy businesses in Erie County, excluding Buffalo. None are located in Amherst. The largest is Perry's Ice Cream in Akron, with 250 to 499 employees, followed by yogurt manufacturer Steuben Foods in Elma, with 50 to 99 employees. Eden Valley Dairy in Eden employs 10 to 19, and both Derby Deli in Derby and Niefergold Dairy in Lawtons employ fewer than five people each.

Table 15

Existing Erie County Dairy Businesses

Business Name	Business Description	Employees	City
Perry's Ice Cream Co Inc	Ice Cream & Frozen Desserts	250-499	Akron
Steuben Foods Inc	Yogurt Manufacturer	50–99	Elma
Eden Valley Dairy LLC	Dairies	10–19	Eden
Derby Deli	Dairies	1–4	Derby
Niefergold Dairy LLC	Dairies	1–4	Lawtons

Note: Excludes businesses in Buffalo

Source: New York State Department of Labor

Key Success Factors

According to IBISWorld, successful dairy product producers require a constant, reliable, and adequate supply of milk inputs. Larger operators tend to have lower per-unit costs through bulk purchases and lower labor costs. The ability to pass on increases in input costs to consumers and other buyers through higher prices helps reduce volatility and maintain profits.

Using specialized equipment and facilities increases production and quality. Because dairy products are largely homogeneous, producers must be able to add value by differentiating their products from the competition through new product types or compelling packaging.

Other Value-Add Food Products Manufacturing

Description, Performance, and Outlook

The Other Value-Add Food Products Manufacturing cluster consists of nine specific subindustries in the larger Food Products Manufacturing industry. The cluster provided 1,790 jobs in Erie County in 2021, an increase of 3% from 2016 (see Table 16). It is expected to shrink by 3% by 2026, for a net loss of 59 jobs. In comparison, countywide employment shrank almost 8% from 2016 to 2021 and is forecast to shrink a further 1% by 2026. Frozen Specialty Food Manufacturing, Confectionery Manufacturing, Commercial Bakeries, and Cookie and Cracker Manufacturing are the largest component industries, each providing over 200 jobs in 2021. Of these, Frozen Specialty Food Manufacturing and Commercial Bakeries lost jobs from 2016 to 2021 and are expected to continue to shrink through 2026, as is Confectionery Manufacturing. Only Cookie and Cracker Manufacturing and Flavoring Syrup and Concentrate Manufacturing show consistent growth from 2016 through 2026, with the latter increasing from fewer than 10 jobs in 2016 to 98 in 2021 and a projected 126 in 2026.

Thirty percent of the cluster's 2016–2021 job growth (17 of 55 new jobs) was due to the county's competitive advantage in the Other Value-Add Food Products Manufacturing cluster. This arises from the county's significant concentrations in Flavoring Syrup and Concentrate Manufacturing, Confectionery Manufacturing from Purchased Chocolate, and Cookie and Cracker Manufacturing, with employment shares 4.3, 3.7, and 2.3 times the national averages, respectively.

Table 16

		2021	2016–202	1 Change	Competitive	2026	2021–2026	6 Change
NAICS	Description	Jobs	Absolute	Relative	Effect	Jobs	Absolute	Relative
311352	Confectionery Manufacturing from Purchased Chocolate	318	50	19%	64	276	(42)	(13%)
311412	Frozen Specialty Food Manufacturing	510	(36)	(7%)	(85)	468	(42)	(8%)
311421	Fruit and Vegetable Canning	27	(6)	(17%)	(4)	20	(8)	(28%)
311811	Retail Bakeries	174	(5)	(3%)	(10)	147	(28)	(16%)
311812	Commercial Bakeries	260	(42)	(14%)	(29)	245	(15)	(6%)
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	98	(4)	(4%)	47	111	13	13%
311821	Cookie and Cracker Manufacturing	230	47	26%	92	258	28	12%
311930	Flavoring Syrup and Concentrate Manufacturing	98	Insf. Data	Insf. Data	1	126	28	28%
311991	Perishable Prepared Food Manufacturing	74	(40)	(35%)	(60)	81	7	9%
Total		1,790	55	3%	17	1,731	(59)	(3%)

Note: The 2016–2021 change data are not available for Flavoring Syrup and Concentrate Manufacturing because the industry had fewer than 10 jobs in 2016. This implies growth of at least 91 jobs – more than a tenfold increase.

Erie County Other Value-Add Food Products Manufacturing Cluster Supply Chain Opportunities

		2021 Deman	d Met	2021	
		by Impoi	rts	Exported Sa	ales
NAICS	Description	Amount	Share	Amount	Share
311352	Confectionery Manufacturing from Purchased Chocolate	\$13,790,842	47%	\$80,869,346	83%
311412	Frozen Specialty Food Manufacturing	\$11,925,490	20%	\$195,941,876	80%
311421	Fruit and Vegetable Canning	\$47,690,300	88%	\$10,686,198	62%
311811	Retail Bakeries	\$16,108,617	68%	\$9,413,649	55%
311812	Commercial Bakeries	\$38,666,274	63%	\$32,709,373	59%
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing	\$1,955,934	37%	\$14,182,498	78%
311821	Cookie and Cracker Manufacturing	\$8,748,439	27%	\$64,776,616	73%
311930	Flavoring Syrup and Concentrate Manufacturing	\$3,687,444	22%	\$12,784,038	47%
311991	Perishable Prepared Food Manufacturing	\$35,643,690	83%	\$7,193,909	49%
Total		\$178,217,032	55%	\$428,557,502	74%

Source: Emsi

About 55% of demand for the cluster's products was met by imports from outside Erie County, indicating that there is potential for local producers to meet more of the local demand (see Table 17). Areas of particular opportunity include Fruit and Vegetable Canning, Perishable Prepared Food Manufacturing, and Retail and Commercial Bakeries. For each of these component industries more than 60% of demand is met by producers from outside Erie County.

While three-quarters (74%) of the Other Value-Add Food Products Manufacturing cluster's sales are to customers outside the county, there may be opportunities for Flavoring Syrup and Concentrate Manufacturers and Perishable Prepared Food Manufacturers to increase sales to customers outside Erie County, though the latter may be constrained by the distance its products can be transported.

Industry Presence in Erie County

The Other Value-Add Food Products Manufacturing cluster represented about 0.4% of total jobs in Erie County in 2021. Camoin identified 45 cluster businesses in Erie County, excluding Buffalo, from the New York State Department of Labor's company database (see Table 18). The largest are Conagra Brands, CSM Bakery Products, Culinary Arts Specialties, and Nutrablend Foods, all with 100 to 249 employees each. Seven cluster businesses are located in Amherst or East Amherst: Mister Snacks and Sakthy Food Corp., each with 20 to 49 employees; Davolio and Original Crunch Roll Factory each employ five to nine workers; and Caramaci's Bakery, Genevieve's Cheese Cakes & Bake, and Insomnia Cookies each employ fewer than five workers.

Existing Erie County Other Value-Add Food Products Manufacturing Businesses

Business Name	Business Description	Employees	City
Conagra Brands Inc	Cookies & Crackers – Manufacturers	100–249	Tonawanda
CSM Bakery Products	Bread/Other Bakery Prod – Ex Cookies	100–249	Lancaster
Culinary Arts Specialties Inc	Frozen Bakery Prods – Except Bread	100–249	Cheektowaga
Nutrablend Foods LLC	Manufacturers	100–249	Lancaster
Di Camillo Baking Co Inc	Bakers – Retail	20–49	Williamsville
Eileen's Centerview Bakery	Bakers – Retail	20–49	West Seneca
Elm Street Bakery	Bakers – Retail	20–49	East Aurora
Mister Snacks Inc	Potato Chips Corn Chips/Snacks (mfrs)	20–49	Amherst
Sakthy Food Corp	Food Products & Manufacturers	20–49	East Amherst
Araypa Factory LLC	Manufacturers (corn flatbread)	10–19	West Seneca
Arts At the Bakery Inc	Bakers – Retail	10–19	West Falls
Bimbo Bakeries USA	Bakers – Retail	10–19	Lancaster
D & L Bakery	Bakers – Retail	10–19	Depew
Kaylena Marie's Bakery Inc	Bakers – Retail	10–19	Orchard Park
Mel's Place	Bread/Other Bakery Prod – Ex Cookies	10–19	Chaffee
NTC Marketing	Frozen Fruit/Fruit Juices/Vegs (mfrs)	10–19	Williamsville
Ohlson's Bakery & Cafe	Bakers – Retail	10–19	Williamsville
Vin Chet Gluten Free Bakery	Bakers – Retail	10–19	Snyder
Alden Bakery & Cafe	Bakers – Retail	5–9	Alden
CRKT-Perfect Protein	Health Food Products – Manufacturers	5–9	Springville
Dark Forest Chocolate Makers	Chocolate & Cocoa – Manufacturers	5–9	Lancaster
Davolio	Vinegar (mfrs)	5–9	East Amherst
Kelly's Country Store	Candy & Confectionery – Manufacturers	5–9	Grand Island
Original Crunch Roll Factory	Manufacturers	5–9	Amherst
Prima Oliva Store & Café	Olive Oil (mfrs)	5–9	Hamburg
Sweet Indulgence Curbside	Bakers – Retail	5–9	Depew
Watson's Chocolates	Chocolate & Cocoa – Manufacturers	5–9	Depew
White River Chocolates	Chocolate & Cocoa – Manufacturers	5–9	Cheektowaga
Babycakes Cupcakery	Bakers – Retail	1–4	Clarence
Baker Management	Bakers – Retail	1–4	Hamburg
Blessings Bakery	Bakers – Cake & Pie	1–4	East Aurora
Blue Eyed Baker LLC	Bakers – Retail	1–4	East Aurora
Brian's Best Gluten Free	Bakers – Retail	1–4	Cheektowaga
Caramici's Bakery	Bakers – Retail	1–4	Amherst
Chrusciki Bakery	Bakers – Retail	1–4	Lancaster
Clarence Country Doughnuts	Bakers – Retail	1–4	Clarence
Creative Creations Cakery	Bakers – Retail	1–4	West Seneca
Deb's Delights Inc	Canned Specialties (mfrs)	1–4	East Aurora
Early Bird Bakery & Cafe	Bakers – Retail	1–4	Lancaster
Fowlers Chocolates East Aurora	Chocolate & Cocoa Manufacturers	1–4	East Aurora
Genevieves Cheese Cakes & Bake	Bakers – Retail	1–4	East Amherst
nsomnia Cookies	Bakers – Retail	1–4	Amherst
Sweet Butter Bakery 716 LLC	Bakers – Retail	1–4	Kenmore
Sweet Pea Bakery	Bakers – Retail	1–4	Hamburg
Unique Sweets Cake Shop	Bakers – Retail	1–4	Angola

Note: Excludes businesses in Buffalo

Source: New York State Department of Labor

Key Success Factors

According to IBISWorld, the ability to pass on increases in commodity and energy costs to consumers and other buyers through higher prices helps maintain profits.

Successful manufacturers produce a variety of products at a large scale, enabling them to spread costs over a large volume of output and reduce per-unit costs.

Producers must anticipate and respond to changes in consumer preferences and input costs to remain competitive in the industry. Guaranteed commodity supplies at fixed prices minimize supply costs and aid production planning.

Successful operators are able to differentiate their products and brands to drive demand for their goods.

Biotech

Description, Performance, and Outlook

The Biotech cluster consists of four specific subindustries from the larger Manufacturing and Professional, Scientific, and Technical Services sectors: Medicinal and Botanical Manufacturing, Biological Products (except Diagnostic) Manufacturing, Testing Laboratories, and Research and Development in Biotechnology (except Nanobiotechnology). The cluster provided 1,635 jobs in Erie County in 2021, an increase of 16% from 2016 (see Table 19). It is expected to grow by an additional 15% by 2026. In comparison, countywide employment shrank almost 8% from 2016 to 2021 and is forecast to shrink a further 1% by 2026. Biological Product Manufacturing is by far the largest component industry, providing 1,032 jobs in 2021. It is also the fastest growing segment, increasing 68% from 2016 to 2021 and projected to grow by another 27% to 2026. Research and Development in Biotechnology also shows consistent growth, expanding by 11% between 2016 and 2021 and a projected 16% from 2021 to 2026. While Testing Laboratories are the second largest segment, with 448 jobs in 2021, they have shed 223 jobs since 2016 and are expected to lose another 57 by 2026.

Despite growth in three of the four component industries, Erie County has had a slight competitive disadvantage in the Biotech cluster relative to the country, adding 11 fewer jobs between 2016 and 2021 than expected. This is expected to shift to a competitive advantage over the next five years, driving one-third of the cluster's job growth between 2021 and 2026. The county has a significant concentration, and competitive advantage, in Biological Product Manufacturing, with an employment share nine times the national average.

Close to two-thirds (64%) of demand for the cluster's products and services was met by imports from outside Erie County, indicating that there may be potential for local businesses to meet more of the county's demand (see Table 20). Areas of particular opportunity include Medicinal and Botanical Manufacturing and Research and Development in Biotechnology. Ninety percent of demand for each of these component industries' products is supplied by imports from outside Erie County.

While almost 80% of the Biotech cluster's sales are to customers outside the county, there may be opportunities for Testing Laboratories, Research and Development in Biotechnology, and Medicinal and Botanical Manufacturing to expand into markets outside Erie County. Just 30% or less of these subsectors' sales are

Table 19

Erie County Biotech Cluster Performance and Outlook

		2021		2016–2021 Change		6–2021 Change Cor		2026	2021–202	6 Change
NAICS	Description	Jobs	Absolute	Relative	Effect	Jobs	Absolute	Relative		
325411	Medicinal and Botanical Manufacturing	13	13	Insf. Data	12	10	(2)	-17%		
325414	Biological Product (except Diagnostic) Manufacturing	1,032	418	68%	263	1,309	276	27%		
541380	Testing Laboratories	448	(223)	-33%	(248)	391	(57)	-13%		
541714	Research and Development in Biotechnology (except Nanobiotechnology)	142	14	11%	(38)	164	22	16%		
Total		1,635	221	16%	(11)	1,875	240	15%		
Source	Emsi									

Source: Emsi

Erie County Biotech Cluster Supply Chain Opportunities

	2021 Demand Met			2021		
		by Impor	ts	Exported Sa	ales	
NAICS	Description	Amount	Share	Amount	Share	
325411	Medicinal and Botanical Manufacturing	\$54,747,327	90%	\$2,536,749	30%	
325414	Biological Product (except Diagnostic) Manufacturing	\$254,686	0%	\$778,668,044	87%	
541380	Testing Laboratories	\$18,418,250	27%	\$6,030,944	11%	
541714	Research and Development in Biotechnology (except Nanobiotechnology)	\$290,170,191	90%	\$6,091,823	16%	
Total		\$363,590,455	64%	\$793,327,561	79 %	

Source: Emsi

to customers outside Erie. Not only does the county have a strong concentration and competitive advantage in Biological Product Manufacturing, this industry also meets all of the local demand for its products and sells 87% of its output to customers outside the county.

Industry Presence in Erie County

The Biotech cluster represented about 0.4% of total jobs in Erie County in 2021. Camoin identified 16 cluster businesses in the county, excluding Buffalo, from the New York State Department of Labor's company database (see Table 21). The largest are Bristol-Myers Squibb in Elma and X-Cell Labs in Amherst, each with 20 to 49 employees. In addition to X-Cell Labs, two other cluster businesses are located in Amherst: Hype Labs and Sero Clinix labs, each with 10 to 19 employees.

Key Success Factors

According to IBISWorld, access to capital is essential in order to finance the costly biotech product research and development process. Because of these costs, most biotech companies are highly specialized and focus their R&D activities to reduce costs.

The biotech industry is highly regulated, and it can take many years to commercialize a product that meets all required standards. It is therefore important for companies to be able to educate the public on the benefits and safety of their products.

Biotech firms need access to a highly skilled workforce with technical expertise and creativity. They must also be able to adopt new technological equipment and techniques to stay competitive.

Existing Erie County Biotech Businesses

Business Name	Business Description	Employees	City
Bristol-Myers Squibb	Drug Millers (mfrs)	20–49	Elma
X-Cell Labs-Western NY	Laboratories	20–49	Amherst
Athenex Pharma Solutions	Pharmaceutical Preparation (mfrs)	10–19	Clarence
Aurora Labs LLC	Laboratories	10–19	East Aurora
Electrosynthesis Co	Laboratories-Research & Development	10–19	Lancaster
Exact Medical Mfg Inc	Manufacturers	10–19	Depew
Four Labs LLC	Laboratories-Research & Development	10–19	Williamsville
Hype Labs LLC	Laboratories-Research & Development	10–19	Amherst
Learning Triangle Labs LLC	Laboratories-Research & Development	10–19	East Aurora
Sero Clinix Labs Inc	Laboratories-Research & Development	10–19	Amherst
Intertek Intertek	Laboratories-Testing	5–9	East Aurora
3rd Rock LLC	Laboratories-Testing	1–4	East Aurora
Catholic Health Laboratory Svc	Laboratories-Testing	1–4	Cheektowaga
Faulring Mechanical Device	Laboratories-Research & Development	1–4	North Collins
McAndrew Lab Inc	Laboratories-Testing	1–4	Orchard Park
TTM Analytical Inc	Laboratories-Testing	1–4	Lancaster

Note: Excludes businesses in Buffalo

Source: New York State Department of Labor

Horticulture/Controlled Environment

Description and Performance

Data on horticulture and other controlled-environment agriculture are not available to the same degree as for other sectors. The Horticulture/Controlled Environment cluster consists of six specific subindustries: Mushroom Production, Other Food Crops Grown Under Cover (incl. Hydroponic Crop Farming), Nursery and Tree Production, Floriculture Production, Finfish Farming and Fish Hatcheries, and Other Aquaculture. At the county level, data were available only for the "parent" industry of the plant production subsectors and only through 2020. Twenty-six Greenhouse and Nursery Production establishments provided 155 jobs in Erie County in 2020, a loss of 18% from 2015. The county also had one Aquaculture establishment of 2020, but the number of jobs was not disclosed. Note that these data do not include sole-proprietor operations.

Figure 22

Greenhouse and Nursery Production in

Erie County

2015–2020 Change					
2020	Absolute	Relative			
155	(33)	-18%			
26	(1)	-4%			
	2020 155	2020 Absolute 155 (33)			

Source: US Bureau of Labor Statistics

The USDA's Census of Agriculture provides another look at horticulture and greenhouse activity in Erie County. It includes the number of operations, square feet under glass or other protection, and the value of sales. Since some operations grow crops both under protection and in the open, it is not always possible to determine the value of sales for only those crops produced under protection The census is conducted every five years; data from the 2017 census are currently the most recent available.

There were 76 floriculture operations in Erie County in 2017, with a total of almost 2.2 million square feet of production in controlled environments (see Table 23). This was an 8% decline in both the number of operations and square feet under production. Sales for these operations, which included 54 acres of crops grown in the open, were \$14.2 million, a 1% increase from 2012, not accounting for inflation. The largest floriculture crops were bedding and garden plants and potted flowering plants, accounting for 1.4 million and 695,340 square feet, respectively. While square feet of bedding and garden plants were 28% below their 2012 area, potted flowering plants square footage increased 87%. Other significant crops grown in controlled environments include vegetable transplants to farm fields (116,009 square feet grown under protection in 2017), greenhouse vegetables and fresh herbs (36,960 square feet), and nursery stock crops (20,848 square feet). Vegetable transplants also grew the fastest between 2012 and 2017, with square footage under protection increasing more than ninefold. The area of greenhouse vegetables and herbs grown under protection expanded by 26%.

Camoin identified 15 cluster businesses in Erie County, excluding Buffalo, from the New York State Department of Labor's company database (see Table 24). The largest is Niagara County Produce Open greenhouse in Clarence, with 100 to 249 employees. Bella Terra Greenhouse & Feeds, Berner Farms, and Thompson Brothers are the next largest, each with five to nine employees.

Suppliers to the cluster include farm, lawn, and garden equipment wholesalers, providers of crop services, and fertilizer manufacturers.

Figure 23

Erie County Horticulture/Controlled Environment Agriculture, 2017

		2017 Sq. Ft. /			-	20 1	2017 Ch Sq. Ft.			
		Under	the		Opera	Operations Protection			Sales	
	Operations	Protection	Open	Sales	Absolute	Relative	Absolute	Relative	Absolute	Relative
Total Floriculture	76	2,197,266	54	\$14,234,162	(7)	-8%	(183,413)	-8%	\$92,813	1%
Bedding/Garden Plants	57	1,405,303	15	\$9,870,699	(15)	-21%	(547,380)	-28%	(\$1,197,959)	-11%
Cut Flowers & Cut Florist Greens	14	(D)	31	\$306,913	(1)	-7%	_	_	_	_
Foliage Plants, Indoor	11	37,095	0	\$270,198	5	83%	12,395	50%	\$108,498	67%
Potted Flowering Plants	40	695,340	(D)	\$3,310,852	15	60%	324,044	87%	\$707,141	27%
Other Floriculture	4	(D)	(D)	\$475,500	2	100%	_	_	_	_
Nursery Stock Crops	28	20,848	1,102	\$8,419,662	(12)	-30%	(57,822)	-73%	(\$5,406,849)	-39%
Bulbs, Corms, Rhizomes, and Tubers	5	(D)	1	\$5,540	2	67%	-	-	(\$5,260)	-49%
Cuttings, Seedlings, Liners, and Plugs	7	(D)	(D)	(D)	2	40%	-	-	-	-
Flower Seeds	1	0	(D)	(D)	0	0%	_	-100%	_	-
Vegetable Seeds	1	0	(D)	(D)	(4)	-80%	-	-100%	-	-
Vegetable Transplants to Farm Fields	12	116,009	0	\$337,046	6	100%	104,009	867%	\$312,366	1266%
Total Greenhouse Vegetables and Fresh Cut Herbs	22	36,960	0	\$132,772	15	214%	7,736	26%	\$92,372	229%
Greenhouse Tomatoes	15	10,428	0	\$32,928	11	275%	1,158	12%	\$23,378	245%
Other Greenhouse Vegetables and Fresh Cut Herbs	21	26,532	0	\$99,844	17	425%	6,578	33%	\$68,994	224%
Greenhouse Fruits and Berries	1	(D)	0	(D)	1	-	-	_	_	-
Mushrooms	5	(D)	0	(D)	5	-	-	-	_	-

(D): Not disclcosed to protect individual farm data.

Source: USDA Census of Agriculture

Key Success Factors

According to IBISWorld, economies of scale in the Horticulture/ Controlled Environment cluster mean that businesses with larger operations can reduce their per-unit growing costs and earn higher returns. Farmers that produce premium crops can earn premium prices and are less vulnerable to competition from imports. It is also important for farmers to respond to changes in market conditions, altering product mixes as prices and tastes change. Developing export markets reduces a grower's dependence on local markets. A horticulture/greenhouse facility would require a site with fertile, uncontaminated soils, sufficient water supply, and good drainage. Based on 2017 Census of Agriculture data, average protected operations range from 700 square feet for greenhouse tomatoes to 29,000 square feet for floriculture.

Table 24

Existing Erie County Greenhouses and Floriculture Businesses

Business Name	Business Description	Employees	City
Niagara County Produce Open	Greenhouses	100–249	Clarence
Bella Terra Greenhouse & Feeds	Greenhouses	5–9	Angola
Berner Farms	Greenhouses	5–9	Elma
Thompson Brothers	Greenhouses	5–9	Clarence Center
Angle Acres Greenhouse	Greenhouses	1–4	Orchard Park
Bedfords Nursery	Greenhouses	1–4	Akron
Bill Weber's Greenhouse & Mkt	Greenhouses	1–4	West Seneca
Chiavetta's Potatoes-Grnhs	Greenhouses	1–4	Angola
Jake's Greenhouse Inc	Greenhouses	1–4	East Concord
Kenneth A Henry Sons Inc	Greenhouses	1–4	Hamburg
Lavocat's Family Greenhouse	Greenhouses	1–4	East Amherst
Mike Weber Greenhouses	Greenhouses	1–4	West Seneca
Miller Farm & Greenhouse	Greenhouses	1–4	Elma
Pase Greenhouses	Greenhouses	1–4	North Collins
Lilies of Field	Ornamental Floriculture & Nursery Prods	1–4	West Falls

Note: Excludes businesses in Buffalo

Source: New York State Department of Labor

6. Agribusiness Opportunities

This section discusses the potential agribusiness development opportunities based on the research analysis as well as the interviews conducted for this study.

Agribusiness Opportunities

Shared Commercial Kitchen Facility (with or without Co-Packing).

The research identified a concentration of relatively small-scale agricultural producers and agribusiness entrepreneurs. Multiple interviews indicated there is a strong market opportunity for a shared commercial kitchen facility that would provide space for local producers and other agribusiness enterprises to create value-added food products. There are no similar facilities available to local producers within a reasonable drive time and it is expected that utilization of this facility at one of the three potential development sites would be high. Co-packing facilities may be feasible to be co-located with a shared commercial kitchen but would likely represent a subsequent development phase once utilization of the kitchen "ramps up." A permanent farmer's market facility appears to have potential and would enhance the economic viability of a shared commercial kitchen facility with opportunities for retail sales of products manufactured in the kitchen.

Brewery/Distillery with Food and Beverage/Entertainment Component.

Breweries have seen rapid growth at the county and regional level over the past five years and the data indicates that much of this growth is attributable to competitive advantages of the area. At the same time, there is a relatively low concentration of breweries in Erie County with respect to the region and the U.S., suggesting there is room for expansion. According to Emsi, breweries' share of county employment is below the national average (location quotient of 0.85), whereas regionally they have an above-average concentration, with a location quotient of 1.3. The sites under consideration also provide easily accessible locations from Millersport Highway. Additionally, there is a relative lack of breweries around the site locations, suggesting a potential market gap and competitive locational advantage to serve households in the northern area of the town (and beyond). The sites are also readily accessible from the University, which represents another source of demand. It is expected that a beverage manufacturing operation alone would have significantly less market viability compared to a brewery with on-site food and beverage or entertainment - or one located with other retail-oriented uses such as a permanent farmer's market facility.

Value-Added Food Product Manufacturing.

A new value-added product manufacturing facility would likely be feasible in Amherst under certain circumstances. It is expected that major large-scale operations would have site location preferences further from population centers where land prices are lower. However, the three potential sites in Amherst offer advantages including highway access and more immediate proximity to retail outlets and restaurants. The market research identified several categories with value-add manufacturing potential, including (but not necessarily limited to):

- <u>Perishable Prepared Foods:</u> Items in this category are prepared fresh making proximity to grocery outlets and others important. Examples include salads, coleslaw, cut/peeled vegetables, individual boxed meals, and other similar items. Vegetable-based products are expected to have the greatest feasibility based on the mix of locally produced crops.
- Desserts and Baked Goods: Flour production activity is high in the County and region and, combined with industry strengths in confectionery manufacturing and ice cream/frozen dessert manufacturing, suggests an opportunity for Amherst. Additionally, there has been recent growth in baked goods retailers, suggesting growing demand for goods. Close proximity to consumers provides a competitive advantage for producers with on-site retail.
- Specialty Dairy Products: With the regional concentration of dairy production, there appears to be an opportunity for Amherst to capture related agribusiness activity. It is not expected the Town would compete favorably for large-scale operations; however, the town has advantages for specialty products, such as specialty and artisan cheese and others, due to its proximity to relatively high-income consumers as well as retail outlets.

Indoor Farming.

The market research identified potential opportunities for both food and nonfood indoor growing, as described below:

 Indoor nonfood farming: There is a significant amount of horticulture and similar growing activity in the local area and



An Example of a small-scale value-add food manufacturing facility (Greenhead Lobster in Bucksport, ME). Photo Source: Greenhead Lobster

region as a whole, including 76 floriculture operations in Erie County among others. Interviews also indicated future growth opportunities for greenhouse growing in the region. Cannabis is also an emerging opportunity with initial state licenses being distributed in anticipation of statewide legalization. This presents an additional future market opportunity for indoor growing as much of this production is typically greenhousebased. The indoor growing of plants for medicinal research may pose an additional opportunity as some of this activity is already occurring; however, future demand is uncertain.

Indoor food farming: Similarly, there is already a concentration of farm operations growing food in greenhouses, including 22 vegetable and fresh cut herb greenhouse operations in Erie County, among others. A large share of local production is products well aligned with the advantages of greenhouse growing, particularly vegetables. In general, industry trends are moving towards production closer to markets, and local year-round production of fresh produce and other products is expected to grow in demand. Amherst's proximity to retailers and restaurants in the Buffalo metro area provides a competitive advantage that some local operations are already taking advantage of.

Soilless farming (Aquaponics/Hydroponics): The national demand outlook for these operations is positive and there are several operations in the region; however, they are relatively few compared to other areas, including in the Toronto region. Interviews indicated some local interest in these facilities, but it is expected that in the immediate term these types of facilities may represent a limited opportunity. Utility rates are a driving site-selection criterion and would need to be further evaluated to understand Amherst's competitive position.

Cold Storage

Interviews indicated a market gap for cold storage/refrigeration facilities serving local and regional producers. There have also been broad industry trends driving demand for cold storage facilities. Real estate data indicates that existing cold storage facilities in Erie County are fully utilized and that new facilities may be needed to meet this need. A large proportion of local crop production, including vegetables, would likely benefit from a local cold storage facility. Such a facility could also be co-located with other agribusiness opportunities, particularly a commercial kitchen and/or a value-add food manufacturing facility.

Other Findings

Proximity to consumers a key agribusiness opportunity for Amherst.

The sites under consideration for agribusiness development in the Town are well positioned in proximity both to northern agricultural districts and to consumer populations. Approximately 119,000 people live within a 10-minute drive (Millersport Highway & North French). Nearly 575,000 live within a 20-minute drive. The proximity to these households, along with easy access via Millersport Highway, provides a relative competitive advantage compared to more outlying towns with respect to agribusinesses with direct-to-consumer (retail) and/or entertainment components.

Animal processing a regional opportunity, but may not be a good fit for Amherst.

The region has an unmet need for animal processing according to multiple interviews. However, there are relatively few local operations with any significant animal production activities, and therefore an Amherst-based location for a regionally serving processing facility is unlikely to be viable as any potential operation would site a facility closer to animal production enterprises to limit transportation distances and costs.

There is a perception that Town policies are not agribusiness-friendly.

Several interviewees indicated that town policies, particularly zoning regulations, are unfavorable for agribusiness. While regulations were not examined as part of this study, this perception, whether real or perceived, may pose challenges for future agribusiness development.

Land costs may pose a challenge.

Land costs are higher in Amherst relative to more rural outlying areas, which may pose a challenge, particularly for uses requiring larger footprints. This challenge may be mitigated, in part, through incentives or public-private partnerships.

Summary of Agribusiness Development Feasibility

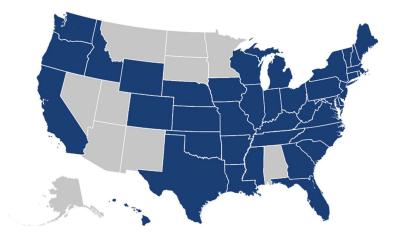
Table 25 provides a summary of the potentially feasible agribusiness opportunities identified in this study, along with their relative level of anticipated feasibility.

Table 25 Summary: Market Feasibility Assessment

Opportunity	Feasibility	Description	Key Analysis Findings
Shared-use Commercial Kitchen	High	A shared use licensed commercial kitchen available to local agricultural producers and small businesses primarily for creating value-added food products. May include co-packing facilities as part of the concept or subsequent phase. Opportunity for incubator programming. Opportunity to be co-located with a farmer's market.	 Concentration of small producers and ag-related entrepreneurs Lack of similar facilities within reasonable distance from area producers Interviews confirm demand and market potential for facility Successful examples in similar markets
Brewery with Food + Beverage/ Entertainment	High	A microbrewery (or distillery) with destination appeal by offering differentiated product and food/beverage or other entertainment options. Opportunity for co-location with other destination agribusinesses such as farmers market.	 Strong industry growth trends Significant population base within reasonable drive-time distance and easy access Lack of immediate competitors
Indoor Farming	Moderate to High	This may consist of greenhouse growing or industrial space for hydroponics/aquaponics and similar. The scale of facilities can range considerably.	 Industry and market strengths in crops well aligned for indoor growing, particularly vegetables and horticulture. Growing demand for locally grown, fresh products will drive need for indoor growing in western New York climate. Viability expected to be greater for greenhouse-based growing relative to "soilless" such as aquaponics/hydroponics, although some opportunity appears to exist.
Value-Added Food Product Manufacturing	Moderate	Small-scale value-add food manufacturing operation with inputs from local producers. Typically consist of light industrial/flex building with	 Several product type opportunities including perishable prepared foods, desserts and baked goods, specialty dairy products, and other specialty products. Proximity to retailers and restaurants Favorable industry and real estate trends
Cold Storage	Limited to Moderate	Facility serving regional cold storage and distribution needs. Typically a warehouse style facility that requires more intensive truck activity than other agribusiness users.	 Limited availability and high demand for cold storage in the region. Aligns with types of produce and crops being produced locally Easy access via interstate a key need for truck traffic However, high levels of trucking activity may be incompatible with some sites.

About Camoin Associates

Camoin Associates has provided economic development consulting services to municipalities, economic development agencies, and private enterprises since 1999. Through the services offered, Camoin Associates has served EDOs and local and state governments from Maine to California; corporations and organizations that include Amazon, Lowes Home Improvement, FedEx, Volvo (Nova Bus) and the New York Islanders; as well as private developers proposing projects in excess of \$6 billion. Our reputation for detailed, place-specific, and accurate analysis has led to over 1,000 projects in 40 states and garnered attention from national media outlets including Marketplace (NPR), Crain's New York Business, Forbes magazine, The New York Times, and The Wall Street Journal. Additionally, our marketing strategies have helped our clients gain both national and local media coverage for their projects in order to build public support and leverage additional funding. We are based in Saratoga Springs, NY, with regional offices in Richmond, VA; Portland, ME; Boston, MA; and Providence, RI. To learn more about our experience and projects in all of our service lines, please visit our website at www.camoinassociates.com. You can also find us on Twitter @camoinassociate and on Facebook.



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