

Ulster County Industry Targeting Study
For the Ulster County Economic Development Alliance

Technical Memorandum: Existing Conditions Analysis

July, 2015

Contents

Introduction	1
Benchmark Analysis with Selected Counties	1
An inventory of the types and size of businesses within Ulster County	16
The physical infrastructure assets of Ulster County	34
Appendix: Detailed Table of Type 1 Multipliers.....	42

Introduction

This document provides an overview of existing conditions of Ulster County's economy. Its purpose is to provide context for the industry targeting study by identifying areas of strength and weakness in Ulster County. The existing conditions analysis provides an overview of the following aspects of the Ulster County's economic condition:

- A demographic and economic overview & benchmarking analysis which considers Ulster County's population and economy by comparison to benchmark counties in the Hudson Valley, New York State and the United States.
- An inventory of types and sizes of businesses in Ulster County including analyses of industry size, concentration, growth trends and buyer/supplier links
- A summary overview of important physical infrastructure in the County, including transportation, public sewer and water, electricity, telecommunications, higher education and the County's agricultural base.

Benchmark Analysis with Selected Counties

At its meeting on June 3, 2015 the project steering committee identified 11 counties in the Hudson Valley, outside the Hudson Valley in New York State, and outside New York State to serve as "benchmarks" for Ulster County. The intention was to compare various aspects of the demographics and economics of these counties to Ulster County to better understand the ways in which Ulster County is (and is not) comparable to these other areas in terms of its ability to sustain and/or attract economic activity. The counties included in this benchmark analysis are:

- Hudson Valley Counties: Other counties in the Hudson Valley: Albany, Dutchess, Greene, Orange, Sullivan, and Saratoga Counties. These counties are included to compare Ulster to other counties in the same geographical region.
- Other Counties of Similar Size &/or location: Tompkins County is the home of Cornell and Ithaca universities. Chittenden County is the largest county in Vermont, home to Burlington and the University of Vermont. Hays County, Texas is of comparable size and located on the edge of the Austin metropolitan area.
- Large Counties with Technology-based Economies: Santa Clara County in California, and King County in Washington, which are included to compare Ulster County to large counties with technology-based economies.

This section provides an overview of the demographics and economics of the benchmark communities compared to Ulster County. It concludes with a summary of the state of economic development in each of these counties. The individual measure of demography and economic activity vary from county to county, and Ulster shows strengths in some areas and weakness in others. Nonetheless, one conclusion that can be drawn from this analysis is that, Ulster has few glaring weaknesses in most of the dimensions included in this benchmark analysis. The data suggest that in many ways, Ulster County appears quite competitive with counties of similar size in New York and beyond. Clearly, its location in a

high-cost state like New York presents its own obstacles for economic development. But, within that set of constraints, Ulster County should have the capability to compete for target industries that are suited to take advantage of those opportunities offered by Ulster County. Such opportunities include:

- relatively lower costs for an area with ready access to New York City area and the growth hub emerging in the Capital District associated with Global Foundries and related activity
- lower costs and high quality of life available for small, specialty firms participating in the greater New York City area's creative arts and information sectors
- key locations in the County that have the transportation access and supporting infrastructure to accommodate larger economic development projects

Demographics

Table 1 shows the population demographics for Ulster County and the benchmark communities of Albany, Dutchess, Greene, Orange, Sullivan, Saratoga, Tompkins, Chittenden, Hays, Santa Clara, and King Counties. Ulster County, with a median age of 43.3, has the second highest median age. Only Greene County has a higher median age, at 45.5. Tompkins County stands out with a median age of 30.6. This low median age can be attributed to the presence of Cornell University, Ithaca College, and Tompkins Cortland Community College, all located within Tompkins County.

Ulster County has a lower per capita income, at \$30,556, and median household income, at \$57,760, than all other benchmark communities except Greene, Tompkins, and Sullivan Counties. Low median and per capita income can be seen as an advantage in that they mean lower labor costs for businesses.

Diversity

Table 1 also shows the race and ethnicity of Ulster County compared to the benchmark communities. Like most of its benchmarks, Ulster County has a majority white population, at 85% white with Hispanic as the next largest ethnicity at 10%. The

Diversity Index measures the probability that two people from the same area will be from different race/ethnic groups. At 40.4, Ulster County's Diversity Index is comparable to most of its benchmarks. Santa Clara stands out with a Diversity Index of 80.8 and significant Asian (34.0%) and Hispanic (26.9%) populations.

Educational Attainment

The bottom portion of Table 1 shows educational attainment for the population age 25 and older. Ulster County has a lower percentage of residents with a bachelor's degree at 16.4% than all other benchmarks, excluding Greene and Sullivan Counties. However Ulster County is comparable to its benchmarks with 14.9% of the population possessing a graduate/professional degree.

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 1. Population Demographics

	Ulster	Albany	Dutchess	Greene	Orange	Sullivan	Saratoga	Tompkins	Chittenden	Hays	Santa Clara	King
Population Summary												
2010 Total Population	182,493	304,204	297,488	49,221	372,813	77,547	219,607	101,564	156,545	157,107	1,781,642	1,931,249
2015 Total Population	184,133	308,039	298,385	49,438	380,063	76,430	228,729	102,051	162,279	187,591	1,867,405	2,049,757
% Change in Pop. 2010-2015	0.89%	1.24%	0.30%	0.44%	1.91%	-1.46%	3.99%	0.48%	3.53%	16.25%	4.59%	5.78%
Median Age												
2015	43.3	39.4	41.2	45.5	37.1	42.8	42.3	30.6	37.1	31.2	37.1	37.9
Median Household Income												
2015	\$57,760	\$58,837	\$75,093	\$48,037	\$73,386	\$49,298	\$75,201	\$52,757	\$63,543	\$62,775	\$95,787	\$73,529
Per Capita Income												
2015	\$30,556	\$34,088	\$35,175	\$26,510	\$31,627	\$25,857	\$36,538	\$30,131	\$33,943	\$29,674	\$42,502	\$40,093
2015 Population by Sex												
Males	91,709	149,258	148,648	25,873	189,920	39,159	112,771	50,455	79,321	93,517	937,224	1,022,249
Females	92,424	158,781	149,737	23,565	190,143	37,271	115,958	51,596	82,958	94,074	930,181	1,027,508
2015 Population by Race/Ethnicity												
Total	184,133	308,039	298,385	49,438	380,063	76,430	228,729	102,051	162,279	187,591	1,867,405	2,049,757
White Alone	85.1%	76.0%	78.2%	89.3%	75.0%	80.7%	92.9%	80.5%	91.3%	78.9%	44.7%	65.8%
Black Alone	6.6%	13.2%	10.7%	6.2%	10.9%	9.3%	1.8%	4.4%	2.4%	3.8%	2.6%	6.6%
American Indian Alone	0.4%	0.2%	0.3%	0.3%	0.5%	0.5%	0.2%	0.4%	0.2%	0.8%	0.7%	0.8%
Asian Alone	2.0%	5.7%	3.9%	0.9%	2.6%	1.7%	2.6%	9.9%	3.3%	1.4%	34.0%	16.3%
Pacific Islander Alone	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.4%	0.8%
Some Other Race Alone	2.9%	1.8%	3.9%	1.2%	7.4%	4.6%	0.7%	1.3%	0.4%	11.8%	12.4%	4.2%
Two or More Races	3.1%	2.9%	2.9%	1.9%	3.5%	3.2%	1.8%	3.5%	2.3%	3.1%	5.2%	5.5%
Hispanic Origin	10.1%	6.0%	11.9%	5.5%	20.1%	15.1%	3.1%	4.7%	2.2%	37.8%	26.9%	9.7%
Diversity Index	40.4	46.8	50.7	28.2	60.9	51.0	18.9	39.9	20.1	66.9	80.8	61.7
2015 Population 25+ by Educational Attainment												
Total	131,441	210,551	204,198	35,873	243,889	53,845	161,100	59,478	106,391	109,819	1,253,297	1,429,153
Less than 9th Grade	3.4%	2.5%	3.6%	4.3%	4.3%	5.6%	1.9%	1.6%	2.7%	4.6%	7.1%	3.4%
9th - 12th Grade, No Diploma	7.2%	4.9%	6.2%	8.6%	7.3%	9.2%	4.3%	4.8%	3.5%	5.3%	5.8%	4.4%
High School Graduate	24.4%	21.6%	22.5%	31.8%	24.5%	28.0%	22.0%	15.9%	17.8%	16.5%	13.8%	13.8%
GED/Alternative Credential	4.5%	3.6%	4.6%	5.2%	4.3%	5.3%	3.4%	3.5%	3.4%	4.6%	1.7%	2.6%
Some College, No Degree	19.2%	16.3%	18.7%	18.3%	20.5%	19.3%	17.6%	14.2%	15.3%	23.8%	17.1%	19.6%
Associate Degree	10.1%	10.8%	10.0%	10.6%	9.1%	10.7%	12.2%	9.1%	8.6%	6.8%	7.3%	8.0%
Bachelor's Degree	16.4%	21.1%	18.7%	11.8%	17.5%	12.4%	22.4%	21.2%	30.0%	26.8%	25.8%	30.1%
Graduate/Professional Degree	14.9%	19.2%	15.7%	9.5%	12.6%	9.6%	16.2%	29.8%	18.7%	11.5%	21.5%	18.1%

Data Note: Persons of Hispanic Origin may be of any race. The Diversity Index measures the probability that two people from the same area will be from different race/ethnic groups
 Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2015 and 2020. Esri converted Census 2000 data into 2010 geography.

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 2. Housing Characteristics

	Ulster	Albany	Dutchess	Greene	Orange	Sullivan	Saratoga	Tompkins	Chittenden	Hays	Santa Clara	King
Housing Unit Summary												
2015 Housing Units	86,080	140,775	120,745	30,017	141,232	49,724	98,656	42,517	68,992	72,496	658,898	897,509
Owner Occupied Housing Units	57.0%	51.8%	62.1%	48.2%	62.0%	39.8%	65.1%	49.4%	61.1%	57.9%	53.3%	52.9%
Renter Occupied Housing Units	27.0%	39.6%	28.3%	19.1%	29.1%	20.3%	24.4%	43.8%	33.3%	33.5%	42.7%	40.3%
Vacant Housing Units	15.9%	8.6%	9.6%	32.7%	8.9%	39.9%	10.5%	6.8%	5.6%	8.6%	3.9%	6.8%
Median Home Value												
2015	\$203,049	\$218,282	\$272,284	\$163,532	\$307,334	\$156,713	\$269,300	\$190,983	\$270,540	\$226,617	\$684,908	\$461,415
2010 Households by Size												
Total	71,049	126,251	107,965	19,823	125,925	30,139	88,296	38,967	61,827	55,245	604,204	789,232
1 Person Household	29.0%	33.8%	26.0%	30.7%	22.1%	29.1%	26.1%	33.3%	27.7%	21.7%	21.8%	31.0%
2 Person Household	34.4%	33.0%	32.4%	36.5%	29.0%	34.7%	35.8%	34.3%	36.5%	33.6%	28.9%	33.1%
3 Person Household	16.1%	15.2%	16.4%	15.0%	17.5%	15.2%	16.5%	15.3%	16.2%	17.7%	17.7%	15.1%
4 Person Household	12.5%	11.3%	14.9%	10.7%	16.5%	11.6%	14.2%	11.0%	13.2%	14.8%	16.9%	12.6%
5 Person Household	5.1%	4.4%	6.7%	4.7%	8.4%	5.9%	5.3%	3.8%	4.5%	7.1%	7.6%	4.9%
6 Person Household	1.8%	1.5%	2.4%	1.5%	3.4%	2.2%	1.6%	1.4%	1.3%	2.9%	3.5%	1.9%
7 + Person Household	1.0%	0.8%	1.2%	0.9%	3.1%	1.5%	0.6%	0.9%	0.7%	2.2%	3.7%	1.4%
Household Summary												
2015 Households	72,387	128,619	109,208	20,198	128,651	29,903	93,020	39,617	65,126	66,268	632,877	836,532
2015 Avg Household Size	2.38	2.26	2.55	2.28	2.86	2.43	2.42	2.25	2.34	2.72	2.90	2.40
2015 Families	44,962	72,240	73,382	12,466	93,057	19,017	61,649	20,227	37,994	43,268	447,737	486,495
2015 Avg Family Size	2.94	2.94	3.10	2.84	3.38	2.99	2.93	2.82	2.89	3.25	3.39	3.06
2010 Households by Tenure and Mortgage Status												
Total	71,049	126,251	107,965	19,823	125,925	30,139	88,296	38,967	61,827	55,245	604,204	789,232
Owner Occupied	68.7%	57.5%	69.5%	72.5%	68.9%	67.0%	72.7%	54.1%	65.2%	65.5%	57.6%	59.1%
Owned w/ Mortgage/Loan	44.5%	39.7%	49.8%	43.1%	52.3%	40.1%	51.6%	34.8%	49.2%	49.4%	44.9%	46.3%
Owned Free and Clear	24.1%	17.8%	19.7%	29.4%	16.6%	26.9%	21.1%	19.4%	16.0%	16.1%	12.8%	12.8%
Renter Occupied	31.3%	42.5%	30.5%	27.5%	31.1%	33.0%	27.3%	45.9%	34.8%	34.5%	42.4%	40.9%

Source: U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2015. Esri converted Census 2000 data into 2010 geography.

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 3. Employment

	Ulster	Albany	Dutchess	Greene	Orange	Sullivan	Saratoga	Tompkins	Chittenden	Hays	Santa Clara	King
Total, 2013	44,305	172,571	92,683	11,282	110,714	18,129	65,942	46,909	89,448	44,874	926,766	1,051,249
%Change 2008-13	-7.2%	-0.8%	-5.4%	-2.4%	5.4%	-2.3%	4.9%	-0.1%	0.8%	21.5%	0.7%	-3.2%
Manufacturing Employment, 2013	3,554	7,424	7,758	803	7,557	1,290	6,650	2,677	9,406	3,815	88,694	77,380
%Change 2008-13	-11.0%	-5.1%	-45.6%	-23.6%	0.2%	15.0%	29.8%	-12.6%	-23.8%	-4.3%	-24.2%	-7.3%
%of Total Employment	8.0%	4.3%	8.4%	7.1%	6.8%	7.1%	10.1%	5.7%	10.5%	8.5%	9.6%	7.4%
Prof. Tech. Svcs., 2013	1,488	5,223	7,497	246	6,326	616	3,866	2,279	10,509	1,974	132,910	98,628
%Change 2008-13	-25.7%	15%	69.0%	0.4%	15.6%	10.6%	0.4%	-8.7%	19.0%	-7.6%	13.0%	5.0%
%of Total Employment	3.4%	8.8%	8.1%	2.2%	5.7%	3.4%	5.9%	4.9%	11.7%	4.4%	14.3%	9.4%
Arts & Ent., 2013	134	2,811	1,617	D	2,267	68	2,248	423	1,923	594	14,330	26,809
%Change 2008-13	31.9%	7.6%	-9.6%	NA	48.4%	13.2%	-5.2%	7.9%	11.8%	50.1%	6.7%	4.8%
%of Total Employment	2.6%	1.6%	1.7%	NA	2.1%	3.4%	3.4%	0.9%	2.1%	1.3%	1.5%	2.6%

Source: US Census Bureau, County Business Patterns. D= data suppressed to avoid disclosing data on one firm

Housing

Table 2 shows housing data for Ulster County and its benchmarks. Renters in Ulster County occupy 27% of housing units. Ulster has a lower percentage of housing units occupied by renters than all benchmark communities except Greene, Sullivan, and Saratoga Counties. A lack of rental housing makes it difficult for entry-level employees to find housing in the area and in turn for businesses to attract new employees. However, at \$203,049, the median home value of Ulster County is relatively low. Lower cost of living attracts new residents to the area and results in lower labor cost for businesses.

Employment

Table 3 shows the total employment and employment by industry for Ulster County and its benchmarks. Manufacturing employment is the largest industry comprising 8% of total employment. This percentage is consistent with the other benchmark communities.

Professional and Technical Services comprises only 3.4% of total employment in Ulster County. This is low compared to the benchmark communities, with Albany and Dutchess at 8% and Santa Clara at 14.3%. This may reflect the fact that, unlike these other counties, Ulster is not adjacent to a major metropolitan area and does not have an economy dominated by large firms. These conditions typically give rise to the need for greater numbers of firms in professional and technical services.

Arts and Entertainment employment in Ulster County at 2.6% is comparable to the benchmark counties. It is slightly lower than Saratoga and Sullivan Counties, both at 3.4%. However, the arts and entertainment in Saratoga and Sullivan Counties are largely tied to tourist venues such as casinos, raceways and performing arts centers. Ulster County has a higher percentage of its arts and entertainment employment in areas such as the production of arts and music rather than tourism/entertainment. This concentration of performing and creative artists has long been recognized as a distinguishing feature of Ulster County's economy.

Economic Development Efforts

Table 4 summarizes the economic development efforts of Ulster County and each of the benchmark counties. The table provides a brief summary of the property tax situation in each county in the left-hand-most column. As you can see, Ulster County's property tax burden is roughly comparable to almost all of the benchmark counties, based upon an "apples-to-apples" comparison performed by the Brookings Institution. The staffing for each effort varies. Economic development organizations operating as stand-alone entities tend to have more staff. Several of the counties (including King County in Washington—a much larger county than Ulster), operate their economic development office through either the executive's office or the county planning department. In such cases, the staff is small but is set up to leverage the resources and expertise of other parts of county government. The table also highlights any unique programs or incentives offered by the county's economic development effort that go beyond standard tax exemptions, HUD-funded programs, etc. The right-hand-most column identifies the target industries for each county economic development effort, to the extent they are articulated in public documents.

Ulster County Industry Targeting Study
Technical Memorandum: Existing Conditions Analysis

The data in the table suggest that Ulster County's approach is consistent with the benchmark counties. As noted above, Ulster's local tax situation is comparable to most of the benchmarks. The organizational effort is consistent with the approach of several of the counties. Note also that Ulster County is one of those with a unique economic development offering: the Ready2Go program, aimed at expediting local approvals of economic development projects.

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 4. Economic Development Organizations by County

<u>County</u>	<u>EDO</u>	<u>Unique Programs/Incentives</u>	<u>Target Industries</u>
Ulster County, NY Avg Home Price \$243,200* Avg Tax Burden \$4,473* Property Tax as Share of Home Value 1.84%*	Office of Economic Development/Economic Development Alliance Staff: 2	Ready2Go Program hires a single set of consultants to represent the project and the applicant and operate in a consensus-building environment prior to submissions. The program matches 50% private property owner funding with 50% program dollars to pursue site plan approvals on the relevant property.	From <i>Ulster Tomorrow</i> : Scientific Apparatus and Research Wood Products Manufacturing Machinery Manufacturing Electronic Equipment Manufacturing High-value-added Services
Albany County, NY Avg Home Price \$207,300 Avg Tax Burden \$3,692 Property Tax as Share of Home Value 1.78%	Center for Economic Growth 39 North Pearl St., Suite 100 Albany, NY 12207 (518)465-8975 Staff: 12		Advanced materials Bio/life sciences, cleantech/energy Homeland security/defense Information Technology and nanotechnology Semiconductors

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 4. Economic Development Organizations by County

County	EDO	Unique Programs/Incentives	Target Industries
Dutchess County, NY Avg Home Price \$314,500 Avg Tax Burden \$5,220 Property Tax as Share of Home Value 1.66%	Dutchess County IDA 3 Neptune Road Poughkeepsie NY 12603 (845)463-5400 Staff: 6 (including Deputy Commissioner of Planning for Strategy and Economic Development)		None publicly articulated.
Greene County, NY Avg Home Price \$181,300 Avg Tax Burden \$2,654 Property Tax as Share of Home Value 1.46%	Greene County IDA 270 Mansion St, Coxsackie, NY 12051 (518) 731-5500 Staff: 10 (staffed by county planning department)	Quantum Fund Amount Available: \$20,000 - \$400,000 Matching Funds: Quantum Fund loans can provide a maximum of 50% of the project financing. The remaining financing may be bank financing, other private financing and owner's equity. There must be sufficient collateral to secure all financing, so an owner's equity contribution is strongly encouraged.	Traditional Manufacturing: Food processing, printing, plastics and rubber Advanced Manufacturing: Fabricated metals, medical devices and electronics Emerging Technologies: Nanotechnology, energy production and biotechnology Technical/Professional Services: Back office and financial services

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 4. Economic Development Organizations by County

County	EDO	Unique Programs/Incentives	Target Industries
Orange County, NY Avg Home Price \$299,500 Avg Tax Burden \$5,883 Property Tax as Share of Home Value 1.96%	Orange County Partnership 40 Matthews Street, Suite 108 Goshen NY, 10924 Phone: 845-294-2323 Staff: 6		No target industries explicitly named. The Partnership focuses on the advantages of the County's transportation infrastructure (I-84, I-87 and Stewart International Airport).
Sullivan County, NY Avg Home Price \$186,000 Avg Tax Burden \$3,575 Property Tax as Share of Home Value 2.02%	Sullivan County Partnership For Economic Development 198 Bridgeville Road Monticello, NY 12701 845.794.1110 Staff: 2		Tourism Light manufacturing Distribution Agriculture Green development industry clusters

Ulster County Industry Targeting Study

Technical Memorandum: Existing Conditions Analysis

Table 4. Economic Development Organizations by County

County	EDO	Unique Programs/Incentives	Target Industries
<p>Saratoga County, NY</p> <p>Avg Home Price \$224,800</p> <p>Avg Tax Burden \$3,528</p> <p>Property Tax as Share of Home Value 1.57%</p>	<p>Saratoga Economic Development Corporation 28 Clinton Street Saratoga Springs, NY 12866-2191 Tel: 518-587-0945</p> <p>Staff: 4</p>		<p>SEDC's Primary Target Market Includes:</p> <p style="padding-left: 20px;">Semiconductor Manufacturers and their supply chain. Flexible and Flat Panels, Microelectronic Mechanical Systems, and Advanced Materials. Businesses located in the Northeast US looking for expansion opportunities with a desire to be engaged in New York's Tech Valley.</p> <p>SEDC's Secondary Target Market Includes:</p> <p style="padding-left: 20px;">Agribusiness Ventures. Distribution, Shipping and Transportation Companies. Technology Startups, Digital Media and Software Related Companies.</p>
<p>Tompkins County, NY</p> <p>Avg Home Price \$165,900</p> <p>Avg Tax Burden \$3,918</p> <p>Property Tax as Share of Home Value 2.36%</p>	<p>Tompkins County Area Development 401 East State Street/East MLK Jr. St. Suite 402B, Ithaca, NY 14850 Phone 607.273.0005</p> <p>Staff: 5</p>	<p>The Ithaca Venture Community (IVC) has been a grassroots volunteer group with a mission of bringing together students and professional entrepreneurs in Ithaca to provide networking and growth opportunities.</p> <p>With the support of TCAD, IVC entrepreneurs organize and lead four Tech Meetups, four Company Site Visits and various networking opportunities a year.</p>	<p>Higher Education</p> <p>Manufacturing</p> <p>Software, Mobile, and Tech-enabled Services Companies</p> <p>Food/Beverage Production and Distribution</p> <p>Visitors and Tourism</p> <p>Agriculture</p>

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 4. Economic Development Organizations by County

<u>County</u>	<u>EDO</u>	<u>Unique Programs/Incentives</u>	<u>Target Industries</u>
Chittenden County, VT Avg Home Price \$263,200 Avg Tax Burden \$4,256 Property Tax as Share of Home Value 1.62%	Greater Burlington Industrial Corporation 60 Main Street. P.O. Box 786, Burlington, VT 05402 Staff: 3	<ul style="list-style-type: none"> Cash incentive for job creation through Vermont Employment Growth Initiative (VEGI) 	"...attract, retain, and expand environmentally sensitive high-paying jobs in the Champlain Valley, and to initiate and support advocacy, education, and collaborative programs in promoting our Vision."
Hays County, TX Avg Home Price \$174,800 Avg Tax Burden \$3,469 Property Tax as Share of Home Value 1.98%	Greater San Marcos Partnership 1340 Wonder World Drive, Suite 108 San Marcos, TX 78666 USA T: 512-393-3400 F: 512-393-3406 Staff: 6		<ul style="list-style-type: none"> Advanced Manufacturing and Materials Aerospace and Aviation Clean Technologies Corporate and Professional Operations Life Sciences

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 4. Economic Development Organizations by County

County	EDO	Unique Programs/Incentives	Target Industries
Santa Clara County, CA Avg Home Price \$681,100 Avg Tax Burden \$4,868 Property Tax as Share of Home Value 0.71%	Office of the County Executive – Asset and Economic Development 70 West Hedding Street 11th Floor, East Wing San Jose, CA 95110 Staff: 2		No Information Available
King County, WA Avg Home Price \$402,300 Avg Tax Burden \$3,697 Property Tax as Share of Home Value 0.92%	Economic Development Council of Seattle and King County 1301 5th Avenue, Suite 1500, Seattle, WA 98101 206.389.8650 Staff: 8	Formal “business incubation” efforts in four key industries: medical devices, interactive media, clean technology and information technology.	<ul style="list-style-type: none"> • Aerospace and Defense • Maritime and Logistics • Clean Technology • Financial and Business Services • Life Sciences and Health • Information and Communication Technology • Outdoor Recreation, Fashion, and Apparel

*Average for 5-year period, 2007-2011. Source: Benjamin Harris & Brian David More, *Residential Property Taxes in the United States*. Brookings Tax Policy Center, November 18, 2013.

Commuting Patterns: An Out-commuting County with ties to New York City

Understanding the commuting patterns in Ulster County provides several insights in to the County's economy. At the most basic level, it provides a sense of where the people who work in the County come from and where the County residents work. That, in turn provides a sense of how economic activity in the County connects to places elsewhere in the region and beyond. Table 5 shows data compiled from the American Community Survey of the US Census Bureau for the year 2012.

The data show that Ulster has a net out-commutation of approximately 20 percent of its workforce, with 57,994 jobs in the County and 72,574 jobs held by County residents in the County and elsewhere. Kingston is the largest population center and employment center in the County, so it is no surprise that it holds first rank as both the chief place of employment for people working in Ulster County and Ulster County residents. It is somewhat surprising that New York City is the second ranked place of residence for Ulster County workers as well as the place of employment for Ulster County residents. The fact that New York far surpasses other locations in the County and such regional population and employment centers as Newburgh, Poughkeepsie and Middletown speaks to a strong connection between the County's economy and that of New York City. Note: the proportion of Ulster County residents working in New York and Ulster County workers commuting from Manhattan is roughly comparable to the corresponding data for Dutchess County. However, that only emphasizes the strong link Ulster has to New York, given the fact that Dutchess is served by MetroNorth commuter rail service and that the southern reaches of that County are much closer by travel time than any point in Ulster County.

The commutation data also make clear the extent to which the labor market in the County is fairly self-contained. Twenty of the top twenty-five areas in which Ulster County workers live are in Ulster itself. The non-Ulster locations are major employment centers such as New York, Poughkeepsie, Newburgh and Albany. Similarly 15 of the top twenty-five areas in which Ulster County residents work are in the County. The major destinations for out-commuters are (as mentioned above) New York, Poughkeepsie and Albany.

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 5. Location of Ulster County Residents' Place of Work and Ulster County Workers' Place of Residence, 2012.

Where Ulster County Workers Live:			Where Ulster County Residents Work:		
	2012			2012	
	Count	Share		Count	Share
Kingston city, NY	5,699	9.8%	Kingston city, NY	9,250	12.7%
New York city, NY	1,729	3.0%	New York city, NY	7,380	10.2%
Hurley CDP, NY	932	1.6%	Poughkeepsie city, NY	2,060	2.8%
Saugerties village, NY	856	1.5%	New Paltz village, NY	1,833	2.5%
Highland CDP, NY	796	1.4%	Lake Katrine CDP, NY	1,399	1.9%
New Paltz village, NY	725	1.3%	Highland CDP, NY	975	1.3%
Poughkeepsie city, NY	600	1.0%	Newburgh city, NY	959	1.3%
Lincoln Park CDP, NY	555	1.0%	Albany city, NY	898	1.2%
Ellenville village, NY	552	1.0%	Woodstock CDP, NY	765	1.1%
Lake Katrine CDP, NY	505	0.9%	Ellenville village, NY	666	0.9%
Saugerties South CDP, NY	496	0.9%	Saugerties village, NY	664	0.9%
Port Ewen CDP, NY	490	0.8%	Lincoln Park CDP, NY	635	0.9%
Glasco CDP, NY	464	0.8%	Fairview CDP, NY	616	0.8%
West Hurley CDP, NY	417	0.7%	Marlboro CDP, NY	525	0.7%
Marlboro CDP, NY	406	0.7%	Rhinebeck village, NY	493	0.7%
Woodstock CDP, NY	395	0.7%	Wallkill CDP, NY	448	0.6%
Tillson CDP, NY	366	0.6%	Gardnertown CDP, NY	388	0.5%
Newburgh city, NY	309	0.5%	Scotchtown CDP, NY	387	0.5%
Rosendale Hamlet CDP, NY	303	0.5%	Stone Ridge CDP, NY	382	0.5%
Shokan CDP, NY	270	0.5%	Arlington CDP, NY	334	0.5%
Stone Ridge CDP, NY	244	0.4%	Middletown city, NY	311	0.4%
Kerhonkson CDP, NY	238	0.4%	Hurley CDP, NY	281	0.4%
Wallkill CDP, NY	217	0.4%	Beacon city, NY	272	0.4%
Hillside CDP, NY	210	0.4%	Orange Lake CDP, NY	262	0.4%
Albany city, NY	194	0.3%	Port Ewen CDP, NY	248	0.3%
<u>All Other Locations</u>	<u>40,026</u>	<u>69.0%</u>	<u>All Other Locations</u>	<u>40,143</u>	<u>55.3%</u>
TOTAL:	57,994	100.0%	TOTAL:	72,574	100.0%

Source: US Census Bureau. American Community Survey, 2012.

An inventory of the types and size of businesses within Ulster County

Structural Composition of the Economy

Figure 1 provides an overview of the composition of the Ulster County economy and how it has changed from 2008 (the official end of the last recession) to 2013 (the most recent year for which data are available). The charts in the figure below provides an overview of the changing structure of the County's economy. Major sectors in the economy are indicated by spheres, with each sphere sized according to the size of employment in that sector. In turn each sector is arrayed along two axes. In the chart at the top of Figure 1, the vertical axis shows the average annual wages for each sector in 2008. The horizontal axis shows the percentage change in employment for each sector from 2002 to 2008. In addition, the green line on the horizontal axis shows the average US wage rate for 2008. The blue line shows the average annual salary for all industries in Ulster County for that year. The figure can be viewed in terms of four quadrants providing an overview of the potential for sectors in each of those quadrants.

In the chart at the bottom of Figure 1, the vertical axis shows the average annual wages for each sector in 2013. The horizontal axis shows the percentage change in employment for each sector from 2008 to 2013. In addition, the green line on the horizontal axis shows the average US wage rate for 2013. The blue line shows the average annual salary for all industries in Ulster County for that year. Note that while the average annual wage for the US increased from \$45,559 to \$49,701 from 2008 to 2013, Ulster County's average annual wage fell from \$35,843 to \$34,099 in the same time period. The changing composition of the chart from 2008 to 2013 suggests that this is due at least in part to a shift in the composition of the County economy, with some high-wage sectors experiencing losses (e.g., various manufacturing sectors)

The figure can be viewed in terms of four quadrants providing an overview of the potential for sectors in each of those quadrants.

Note: the use of the quadrants in not intended to provide a detailed diagnosis of the sectors, but rather to suggest ways of thinking about the condition of each of the sectors in each quadrant.

Innovators: the upper left-hand quadrant identifies sectors with relatively high wages and shrinking employment. These are sectors that could be using technology to improve productivity to boost wages while eliminating jobs.

Potential Problems: the lower left-hand quadrant identifies sectors with relatively low wages and shrinking employment. These are sectors that could be suffering from a lack of competitiveness and are thereby losing employment and they lose business to competitors.

Cost Minimizers: the lower right-hand quadrant shows sectors with relatively low wages and above-average employment growth. These are sectors that could be competing for new business by controlling costs (including wages) to sustain a competitive advantage.

Growth Engines: the upper right-hand quadrant shows sectors with both relatively high wages and above-average employment growth. Sectors in this quadrant could be important sources of high-wage job growth in the future.

As you can see, tourism & hospitality and retail trade have remained two of the largest employers in the County, with tourism employing 7,000 workers and retail trade accounting for 9,000 workers. As shown in the figure, both of the sectors pay wages below the County average and have experienced employment growth while employment in the US economy declined 0.2 percent overall.

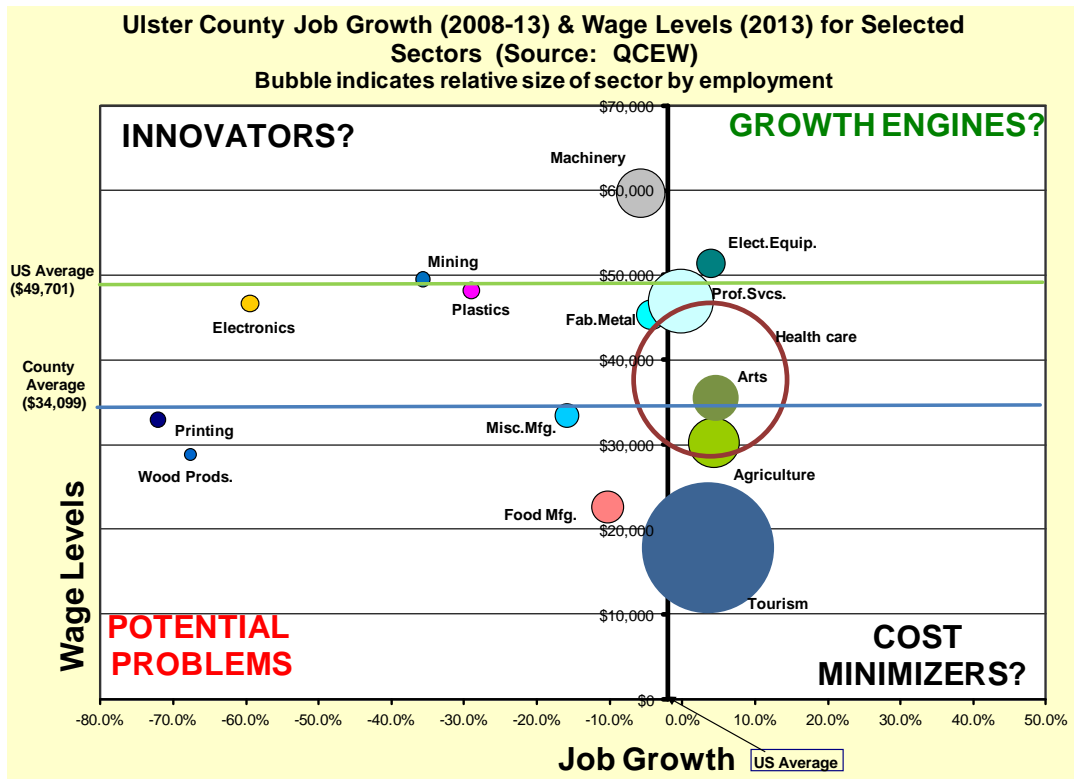
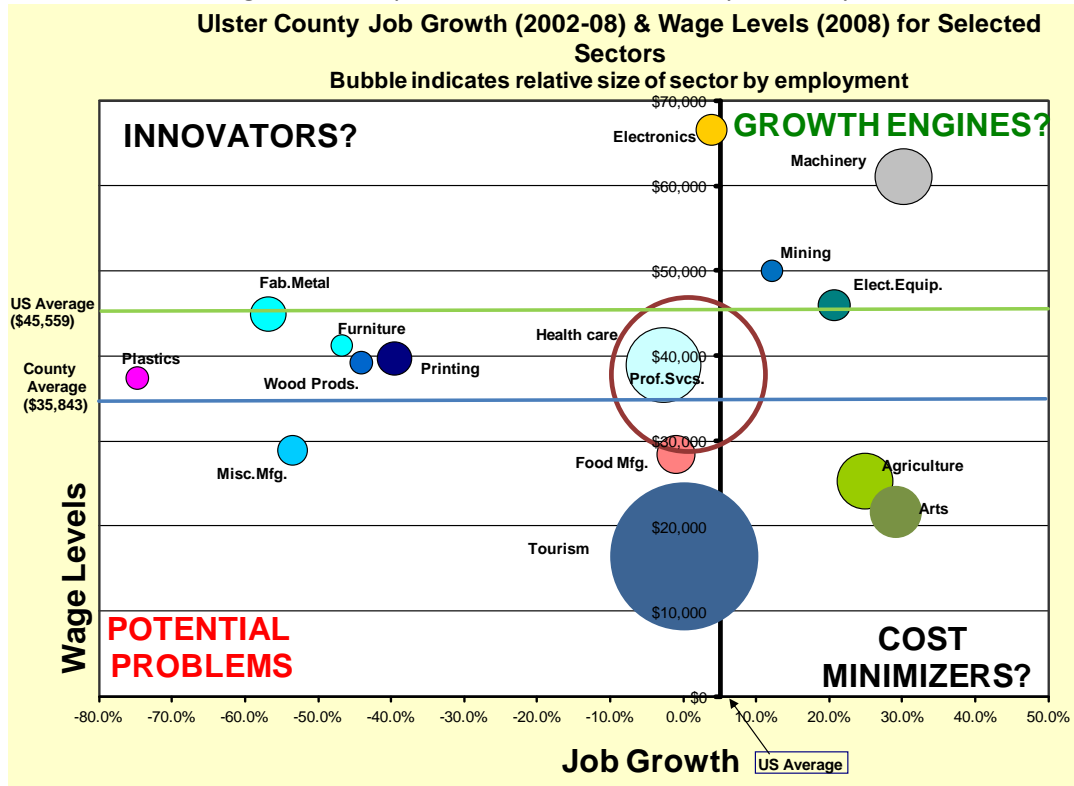
There are several smaller sectors that play an important role in the County economy. Several of these fall under the general category of advanced manufacturing. Machinery manufacturing and electrical equipment manufacturing are small, high-wage sectors. They both outpaced job growth in the overall economy from 2002 to 2008, but have lagged behind in the 2008-2013 time period. Fabricated metals and miscellaneous manufacturing are small sectors that experienced declines in employment but fairly robust wage growth during this time. Food manufacturing employment declined from 2008-2013, but saw wages rise by almost a third during that period.

Professional services jobs saw their pay rise relative to the US average, while experiencing little job growth (or decline) in the County in the two time periods.

Agriculture and the arts are both located in the “cost minimizers” quadrant. With total employment levels that equal or exceed many of the manufacturing sectors in the County, both sectors have outpaced overall US job growth in both time periods.

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

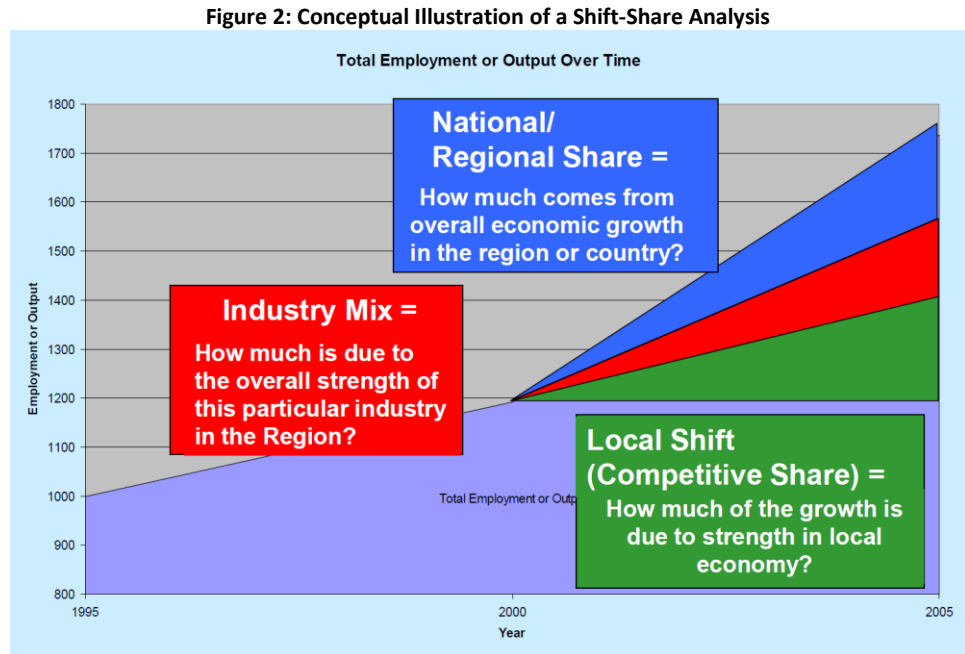
Figure 1. Composition of the Ulster County Economy, 2008 & 2013.



Source: US Bureau of Labor Statistics, Quarterly Census of Employment & Wages.

Shift-Share Analysis

Figure 2 presents an illustration of shift-share analysis. A “shift-share analysis” compares changes in job growth in a local area with changes in a larger economy in which the area is located to isolate the factors driving the local changes. Shift-share analysis isolates the share of overall growth in the County that can be attributed to the overall growth in the United States economy (the



“Regional Share”/ blue wedge). Next, the analysis isolates the share of overall growth in the County due to growth in that particular industry cluster in the US economy (“Industry Mix”/ red wedge). Finally, the analysis identifies the share of overall growth due to a particular strength in the County economy itself (“Local Shift”/green wedge). The shift/share analysis has been used to compare growth in Ulster County to growth in the New York State and then to compare growth in the County to growth in the Mid-Hudson area (e.g., Dutchess, Greene, Orange, Ulster and Sullivan counties).

The results of the shift/share analysis are provided in Table 6. The first part of the table shows the results for Ulster County industries when employment change in the County from 2008-2013 is compared to the New York State economy. The lower part of the table compares changes in Ulster County employment to those in the larger Mid-Hudson region of Dutchess, Greene, Orange, Sullivan and Ulster counties. For each sector named in the table, the average annual employment in that sector in Ulster County in 2013 is provided in parenthesis following the industry name.

The left-hand side of the table shows industries that are growing at the State level (Positive Industry Mix) and in which the County industry is also growing faster (or declining slower) than the overall economy statewide. Three County industries are in this position: beverage manufacturing, other information services, performing arts and repair and maintenance services. The analysis suggests these are overall favorable industries to have in the County. The right hand portion of the table shows industries that are declining or growing slowly at the State level, but for which those industries in the County are growing faster than the overall economy. This indicates industries that may be struggling at the State level, but for which Ulster County remains a favorable location. This includes textile product

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

mills, nonmetallic mineral manufacturing, fabricated metal manufacturing, machinery manufacturing, electronic equipment manufacturing, transportation equipment manufacturing, miscellaneous store retailers, and whole sale trade.

The bottom portion of the table shows that, when compared to the regional economy, a few more industries have both a positive industry mix and local shift. The added industries include professional & technical services, other information services, and transportation equipment manufacturing. Those additional industries that have a positive local shift compared to the region but a negative industry mix at the regional level include merchant wholesalers, transportation and warehousing, motion picture & sound recording, building material stores, general merchandise stores and miscellaneous retailers.

Table 6. Summary of Results of Shift/Share Analysis	
Ulster County industries versus New York State	
Positive Industry Mix & Positive Local Shift (2013 Ulster County Employment)	Negative Industry Mix but Positive Local Shift (2013 Ulster County Employment)
<ul style="list-style-type: none"> • Beverage & Tobacco Product Manufacturing (169) • Other Information Services (220) • Performing Arts (286) • Repair & Maintenance Services (654) 	<ul style="list-style-type: none"> • Textile Product Mills (109) • Nonmetallic Mineral Manufacturing (238) • Fabricated Metal Manufacturing (332) • Machinery Manufacturing (866) • Electronic Equipment & Appliance Manufacturing (291) • Transportation Equipment Manufacturing (61) • Miscellaneous Store Retailers (347) • Wholesale Trade (1,379)
Ulster County Industries versus the region including Dutchess, Greene, Orange Sullivan & Ulster Counties	
Positive Industry Mix & Positive Local Shift (2013 Ulster County Employment)	Negative Industry Mix but Positive Local Shift (2013 Ulster County Employment)
<ul style="list-style-type: none"> • Beverage & Tobacco Product Manufacturing (169) • Professional & Technical Services (1,543) • Other Information Services (220) • Transportation Equipment Manufacturing (61) • Performing Arts (286) • Repair & Maintenance Services (654) 	<ul style="list-style-type: none"> • Nonmetallic Mineral Manufacturing (238) • Merchant Wholesalers, Electronic Markets, Agents & Brokers(104) • Transportation & Warehousing (1,395) • Motion Picture & Sound Recording Industry (88) • Building Material & Garden Equipment & Supply Stores (745) • General Merchandise Stores (1,294) • Miscellaneous Store Retailers (347)

A few of these sectors require further definition to better understand the extent to which they constitute opportunities for the County. These are described below.

Repair and Maintenance: According to the Bureau of Labor Statistics, “Industries in the Repair and Maintenance subsector restore machinery, equipment, and other products to working order. These establishments also typically provide general or routine maintenance (i.e., servicing) on such products to ensure they work efficiently and to prevent breakdown and unnecessary repairs. . . .

The repair and maintenance subsector consists of these industry groups:

- Automotive Repair and Maintenance: NAICS 8111
- Electronic and Precision Equipment Repair and Maintenance: NAICS 8112
- Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair and Maintenance: NAICS 8113
- Personal and Household Goods Repair and Maintenance: NAICS 8114”¹

Virtually all of Ulster County’s employment in this sector is in establishments involved in automotive repair and maintenance. This is an industry that typically serves local needs. While an important part of the local economy, its growth depends upon growth in other sectors of the local economy. As such, there is rarely a need to induce this type of growth in an economy. It will grow as the rest of the local economy grows.

Other Information Services: According to the Bureau of Labor Statistics, “Industries in the Other Information Services subsector group establishments supplying information, storing and providing access to information, searching and retrieving information, operating Web sites that use search engines to allow for searching information on the Internet, or publishing and/or broadcasting content exclusively on the Internet. The main components of the subsector are news syndicates, libraries, archives, exclusive Internet publishing and/or broadcasting, and Web Search Portals.”²

This sector includes information storage firms such as Iron Mountain. There may be some unique opportunities in this industry.

Wholesale Electronics Markets & Agents & Brokers: According to the Bureau of Labor Statistics, “Industries in the Wholesale Electronic Markets and Agents and Brokers subsector arrange for the sale of goods owned by others, generally on a fee or commission basis. They act on behalf of the buyers and sellers of goods. This subsector contains agents and brokers as well as business to business electronic markets that facilitate wholesale trade.”³

Many firms in this sector appears to be affiliated with the producers of such goods in the County (e.g, a subsidiary of an electronics firm responsible for producing the goods in question). However there are

¹ <http://www.bls.gov/iag/tgs/iag811.htm>

² <http://www.bls.gov/iag/tgs/iag519.htm>

³ <http://www.bls.gov/iag/tgs/iag425.htm>

Ulster County Industry Targeting Study
Technical Memorandum: Existing Conditions Analysis

some successful firms in the County that appear to be in this sector (e.g., MarkerTek through its role as a distributor of audio and video recording equipment).

Thus the analysis presents a picture of Ulster County as an attractive location for sectors that showed statewide or regional growth (including beverage product manufacturing, other information services as well as professional & technical services). The County also appears to be an attractive location for industries that may be declining at the State or regional level. These include a variety of manufacturing sectors as shown in the right hand column of Table 8. The fact that the local industries are resisting the declines seen at the regional or state level suggest they are niche operations, consistent with the idea that Ulster County has the capacity to support certain specialty operations in manufacturing. Detailed tables summarizing the shift/share analysis are provided below.

Ulster County Industry Targeting Study

Technical Memorandum: Existing Conditions Analysis

Table 7.

Average Employment Shift-Share Analysis by Sector, New York State (NYS) vs. Ulster County (2008-2013)						
Industry	Avg. Empl. Ulster (2013)	Percent Change (2008-2013)		Shift-Share Analysis		
		Ulster	NYS	State Share	Industry Share	Local Share
Total, All Industries	57,207	-5.8%	1.0%	1.0%	0.0%	-6.8%
Total, All Private	44,199	-4.0%	2.8%	1.0%	1.3%	-6.8%
Agriculture, Forestry, Fishing and Hunting	938	4.3%	8.0%	1.0%	7.0%	-8.7%
Mining, Quarrying, and Oil and Gas Extraction	85	-85.7%	-20.7%	1.0%	-21.7%	-15.0%
Utilities	0	n/a	-7.1%	1.0%	-8.1%	n/a
Construction	1,969	-20.7%	-9.2%	1.0%	-10.2%	-11.5%
Construction of Buildings	496	-17.7%	-11.1%	1.0%	-12.1%	-6.6%
Heavy and Civil Engineering Construction	133	-31.8%	-4.8%	1.0%	-5.8%	-27.0%
Specialty Trade Contractors	1,340	-20.4%	-9.0%	1.0%	-10.0%	-11.5%
Manufacturing	3,864	-16.4%	-14.6%	1.0%	-15.6%	-1.9%
Food Manufacturing	367	-10.3%	4.9%	1.0%	3.9%	-15.2%
Beverage and Tobacco Product Manufacturing	169	160.0%	11.1%	1.0%	10.1%	148.9%
Textile Mills	33	n/a	-22.2%	1.0%	-23.2%	n/a
Textile Product Mills	109	-7.6%	-22.0%	1.0%	-23.0%	14.4%
Apparel Manufacturing	26	-59.4%	-26.7%	1.0%	-27.7%	-32.7%
Leather and Allied Product Manufacturing	D	n/a	-20.7%	1.0%	-21.7%	n/a
Wood Product Manufacturing	52	-67.7%	-10.4%	1.0%	-11.4%	-57.3%
Paper Manufacturing	D	n/a	-11.7%	1.0%	-12.7%	n/a
Printing and Related Support Activities	92	-72.1%	-29.6%	1.0%	-30.6%	-42.5%
Petroleum and Coal Products Manufacturing	0	n/a	-8.9%	1.0%	-9.9%	n/a
Chemical Manufacturing	129	-24.6%	-12.9%	1.0%	-13.9%	-11.6%
Plastics and Rubber Products Manufacturing	98	-29.0%	-10.6%	1.0%	-11.7%	-18.3%
Nonmetallic Mineral Product Manufacturing	238	39.2%	-12.7%	1.0%	-13.7%	51.8%
Primary Metal Manufacturing	0	n/a	-16.5%	1.0%	-17.5%	n/a
Fabricated Metal Product Manufacturing	332	-4.3%	-7.8%	1.0%	-8.8%	3.5%
Machinery Manufacturing	866	-5.8%	-15.0%	1.0%	-16.0%	9.2%
Computer and Electronic Product Manufacturing	109	-59.5%	-17.9%	1.0%	-18.9%	-41.6%
Electrical Equipment, Appliance, and Component Manufacturing	291	3.9%	-13.2%	1.0%	-14.2%	17.1%
Transportation Equipment Manufacturing	61	84.8%	-34.2%	1.0%	-35.2%	119.0%
Furniture and Related Product Manufacturing	81	-40.0%	-21.0%	1.0%	-22.0%	-19.0%
Miscellaneous Manufacturing	218	-15.8%	-14.2%	1.0%	-15.2%	-1.6%
Wholesale Trade	1,879	4.1%	-4.5%	1.0%	-5.5%	8.6%
Merchant Wholesalers, Durable Goods	519	-0.4%	-9.6%	1.0%	-10.6%	9.2%
Merchant Wholesalers, Nondurable Goods	757	2.9%	-0.2%	1.0%	-1.2%	3.0%
Wholesale Electronic Markets and Agents and Brokers	104	52.9%	0.5%	1.0%	0.5%	52.4%
Retail Trade	8,619	-7.2%	3.8%	1.0%	2.3%	-10.4%
Motor Vehicle and Parts Dealers	872	-4.7%	-1.4%	1.0%	-2.4%	-3.3%
Furniture and Home Furnishings Stores	155	-15.8%	-8.4%	1.0%	-9.4%	-7.4%
Electronics and Appliance Stores	212	-21.2%	0.0%	1.0%	-1.0%	-21.2%
Building Material and Garden Equipment and Supplies Dealers	745	-4.7%	-3.6%	1.0%	-4.6%	-1.1%
Food and Beverage Stores	2,466	3.5%	9.0%	1.0%	7.9%	-5.4%
Health and Personal Care Stores	612	2.2%	5.2%	1.0%	4.2%	-3.1%
Gasoline Stations	573	-11.6%	0.6%	1.0%	-0.4%	-12.2%
Clothing and Clothing Accessories Stores	447	-29.5%	0.3%	1.0%	-0.7%	-29.8%
Sporting Goods, Hobby, Musical Instrument, and Book Stores	358	-38.0%	-13.3%	1.0%	-14.3%	-24.7%
General Merchandise Stores	1,294	4.2%	12.9%	1.0%	11.9%	-8.7%
Miscellaneous Store Retailers	347	-2.8%	-3.3%	1.0%	-4.3%	0.5%
Nonstore Retailers	539	-22.3%	10.9%	1.0%	9.9%	-33.2%
Transportation and Warehousing	1,395	-9.0%	-3.8%	1.0%	-4.8%	-5.2%
Air Transportation	0	n/a	-5.0%	1.0%	-6.0%	n/a
Rail Transportation	0	n/a	-100.0%	1.0%	-101.0%	n/a
Water Transportation	0	n/a	-15.0%	1.0%	-16.0%	n/a
Truck Transportation	146	-21.5%	-2.5%	1.0%	-3.5%	-19.0%
Transit and Ground Passenger Transportation	845	-2.2%	2.1%	1.0%	1.1%	-4.3%
Pipeline Transportation	0	n/a	-8.2%	1.0%	-9.2%	n/a
Scenic and Sightseeing Transportation	0	n/a	17.0%	1.0%	16.0%	n/a
Support Activities for Transportation	31	-41.5%	-8.8%	1.0%	-9.8%	-37.2%
Postal Service	0	n/a	96.4%	1.0%	95.3%	n/a
Couriers and Messengers	245	n/a	-12.8%	1.0%	-13.8%	n/a
Warehousing and Storage	116	-43.4%	0.2%	1.0%	-0.8%	-43.6%
Information	962	-1.2%	-1.0%	1.0%	-2.0%	-0.3%
Publishing Industries (except Internet)	126	-53.0%	-19.7%	1.0%	-20.7%	-33.3%
Motion Picture and Sound Recording Industries	88	0.0%	25.0%	1.0%	24.0%	-25.0%
Broadcasting (except Internet)	0	-100.0%	-3.2%	1.0%	-4.2%	-96.8%
Telecommunications	195	-18.8%	-11.0%	1.0%	-12.1%	-7.7%
Data Processing, Hosting, and Related Services	0	-100.0%	-8.5%	1.0%	-9.5%	-91.5%
Other Information Services	220	54.9%	44.9%	1.0%	43.9%	10.0%
Finance and Insurance	1,382	-24.6%	-7.8%	1.0%	-8.8%	-16.8%
Credit Intermediation and Related Activities	772	-24.4%	-5.8%	1.0%	-6.8%	-18.6%
Securities, Commodity Contracts, and Other Financial Investments and Related Activities	122	10.9%	-10.3%	1.0%	-11.3%	21.2%
Insurance Carriers and Related Activities	486	-30.1%	-2.3%	1.0%	-3.3%	-27.8%
Funds, Trusts, and Other Financial Vehicles	0	-100.0%	-91.4%	1.0%	-92.4%	-8.6%
Real Estate and Rental and Leasing	765	3.9%	-2.2%	1.0%	-3.3%	6.2%
Real Estate	624	14.7%	-0.4%	1.0%	-1.4%	15.1%
Rental and Leasing Services	139	-25.7%	-12.7%	1.0%	-13.7%	-12.9%
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	0	-100.0%	-11.4%	1.0%	-12.4%	-88.6%
Professional, Scientific, and Technical Services	1,543	-0.2%	4.5%	1.0%	3.5%	-4.7%
Professional, Scientific, and Technical Services	1,543	-0.2%	4.5%	1.0%	3.5%	-4.7%
Management of Companies and Enterprises	444	4.7%	4.9%	1.0%	3.9%	-0.2%
Management of Companies and Enterprises	444	4.7%	4.9%	1.0%	3.9%	-0.2%
Administrative and Support and Waste Management and Remediation Services	2,188	-0.1%	3.2%	1.0%	2.2%	-3.4%
Administrative and Support Services	2,067	0.2%	3.0%	1.0%	2.0%	-2.8%
Waste Management and Remediation Services	122	-4.7%	7.8%	1.0%	6.8%	-12.5%
Educational Services	732	-9.0%	10.2%	1.0%	9.2%	-19.2%
Educational Services	732	-9.0%	10.2%	1.0%	9.2%	-19.2%
Health Care and Social Assistance	8,848	3.9%	8.4%	1.0%	7.4%	-4.4%
Ambulatory Health Care Services	3,268	7.2%	18.4%	1.0%	17.4%	-10.8%
Hospitals	1,500	-11.3%	3.7%	1.0%	2.7%	-14.9%
Nursing and Residential Care Facilities	2,557	22.3%	2.1%	1.0%	1.1%	20.3%
Social Assistance	1,524	-10.3%	5.5%	1.0%	4.5%	-15.8%
Arts, Entertainment, and Recreation	798	4.6%	7.8%	1.0%	6.8%	-3.2%
Performing Arts, Spectator Sports, and Related Industries	286	58.0%	4.0%	1.0%	3.0%	54.0%
Museums, Historical Sites, and Similar Institutions	54	-19.4%	2.8%	1.0%	1.8%	-22.2%
Amusement, Gambling, and Recreation Industries	458	-11.1%	11.5%	1.0%	10.5%	-22.6%
Accommodation and Food Services	6,470	3.5%	19.1%	1.0%	18.1%	-15.6%
Accommodation	1,953	-3.0%	10.0%	1.0%	9.0%	-12.9%
Food Services and Drinking Places	4,517	6.6%	20.6%	1.0%	19.6%	-14.0%
Other Services (except Public Administration)	1,997	-3.7%	5.2%	1.0%	4.2%	-8.9%
Repair and Maintenance	654	27.7%	2.6%	1.0%	1.5%	25.2%
Personal and Laundry Services	631	4.0%	10.9%	1.0%	9.9%	-7.0%
Religious, Grantmaking, Civic, Professional, and Similar Organizations	660	-23.5%	2.5%	1.0%	1.5%	-26.0%
Private Households	52	-42.9%	4.1%	1.0%	3.1%	-47.0%
Total, All Government	13,008	-9.9%	-5.6%	1.0%	-6.6%	-3.7%
Federal Government	439	-6.0%	-8.5%	1.0%	-9.5%	2.5%
State Government	3,844	-7.6%	-7.5%	1.0%	-8.5%	-0.1%
Local Government	8,725	-10.1%	-4.8%	1.0%	-5.8%	-5.3%
Unclassified	113	113.2%	35.8%	1.0%	34.8%	77.4%

Ulster County Industry Targeting Study

Table 8.

Average Employment by Industry, Existing Conditions Analysis (2008-2013)						
*Dutchess, Green, Orange, Ulster & Sullivan						
Industry	Avg. Empl. Ulster (2013)	Percent Change (2008-2013)			Shift-Share Analysis	
		Ulster	MHC	Regional Share	Industry Share	Local Share
Total, All Industries	57,207	-5.3%	-2.5%	-2.5%	0.0%	-2.8%
Total, All Private	44,199	-4.0%	-0.7%	-2.5%	1.9%	-3.4%
Agriculture, Forestry, Fishing and Hunting	938	4.3%	4.2%	-2.5%	6.7%	0.2%
Mining, Quarrying, and Oil and Gas Extraction	83	-35.7%	-3.9%	-2.5%	-1.4%	-31.8%
Utilities	D	n/a	-4.1%	-2.5%	-1.6%	n/a
Construction	1,969	-20.7%	-21.4%	-2.5%	-18.9%	0.7%
Manufacturing	3,364	-16.4%	-13.2%	-2.5%	-10.7%	-3.2%
Food Manufacturing	367	-10.3%	31.9%	-2.5%	34.4%	-42.2%
Beverage and Tobacco Product Manufacturing	169	160.0%	98.3%	-2.5%	100.8%	61.7%
Textile Mills	33	n/a	-21.4%	-2.5%	-18.9%	n/a
Textile Product Mills	109	-7.6%	-10.0%	-2.5%	-7.5%	2.4%
Apparel Manufacturing	26	-59.4%	-47.7%	-2.5%	-45.2%	-11.7%
Leather and Allied Product Manufacturing	D	n/a	-100.0%	-2.5%	-97.5%	n/a
Wood Product Manufacturing	52	-67.7%	-27.9%	-2.5%	-25.4%	-39.8%
Paper Manufacturing	D	n/a	94.0%	-2.5%	96.5%	n/a
Printing and Related Support Activities	92	-72.1%	-43.3%	-2.5%	-40.8%	-28.8%
Petroleum and Coal Products Manufacturing	D	n/a	-82.5%	-2.5%	-80.0%	n/a
Chemical Manufacturing	129	-24.6%	-0.5%	-2.5%	2.0%	-24.0%
Plastics and Rubber Products Manufacturing	98	-29.0%	-27.6%	-2.5%	-25.1%	-1.4%
Nonmetallic Mineral Product Manufacturing	238	39.2%	-17.2%	-2.5%	-14.7%	56.4%
Primary Metal Manufacturing	D	n/a	4.7%	-2.5%	7.2%	n/a
Fabricated Metal Product Manufacturing	332	-4.3%	-11.1%	-2.5%	-8.6%	6.7%
Machinery Manufacturing	866	-5.8%	-6.1%	-2.5%	-3.6%	0.4%
Computer and Electronic Product Manufacturing	109	-59.5%	n/a	-2.5%	-96.5%	n/a
Electrical Equipment, Appliance, and Component Manufacturing	291	3.9%	6.0%	-2.5%	8.5%	-2.1%
Transportation Equipment Manufacturing	61	84.8%	25.6%	-2.5%	28.1%	59.3%
Furniture and Related Product Manufacturing	81	-40.0%	-31.6%	-2.5%	-29.1%	-8.4%
Miscellaneous Manufacturing	218	-15.8%	-6.5%	-2.5%	-4.0%	-9.3%
Wholesale Trade	1,379	4.1%	1.6%	-2.5%	4.1%	2.5%
Merchant Wholesalers, Durable Goods	519	-0.4%	-5.5%	-2.5%	-3.0%	5.1%
Merchant Wholesalers, Nondurable Goods	757	2.9%	19.0%	-2.5%	21.5%	-16.1%
Wholesale Electronic Markets and Agents and Brokers	104	52.9%	-20.3%	-2.5%	-17.8%	73.2%
Retail Trade	8,619	-7.2%	-0.2%	-2.5%	2.3%	-6.9%
Motor Vehicle and Parts Dealers	872	-4.7%	-4.5%	-2.5%	-1.9%	-0.2%
Furniture and Home Furnishings Stores	155	-15.8%	-5.3%	-2.5%	-2.8%	-10.5%
Electronics and Appliance Stores	212	-21.2%	-21.1%	-2.5%	-18.6%	0.0%
Building Material and Garden Equipment and Supplies Dealers	745	-4.7%	-11.0%	-2.5%	-8.5%	6.2%
Food and Beverage Stores	2,466	3.5%	9.6%	-2.5%	12.1%	-6.1%
Health and Personal Care Stores	612	2.2%	3.9%	-2.5%	6.4%	-1.7%
Gasoline Stations	573	-11.6%	5.1%	-2.5%	7.6%	-16.7%
Clothing and Clothing Accessories Stores	447	-29.5%	19.2%	-2.5%	21.7%	-48.7%
Sporting Goods, Hobby, Musical Instrument, and Book Stores	358	-38.0%	-11.7%	-2.5%	-9.2%	-26.3%
General Merchandise Stores	1,294	4.2%	-7.8%	-2.5%	-5.3%	12.0%
Miscellaneous Store Retailers	347	-2.8%	-4.8%	-2.5%	-2.3%	2.0%
Nonstore Retailers	539	-22.3%	-17.8%	-2.5%	-15.3%	-4.5%
Transportation and Warehousing	1,395	-9.0%	-12.8%	-2.5%	-10.3%	3.8%
Information	962	-1.2%	-16.8%	-2.5%	-14.3%	15.5%
Publishing Industries (except Internet)	126	-53.0%	-34.5%	-2.5%	-32.0%	-18.4%
Motion Picture and Sound Recording Industries	88	0.0%	-20.1%	-2.5%	-17.6%	20.1%
Broadcasting (except Internet)	D	-100.0%	-28.4%	-2.5%	-25.9%	n/a
Telecommunications	195	-18.8%	-4.4%	-2.5%	-1.9%	-14.4%
Data Processing, Hosting, and Related Services	D	-100.0%	-78.4%	-2.5%	-75.9%	n/a
Other Information Services	220	54.9%	7.5%	-2.5%	10.0%	47.5%
Finance and Insurance	1,382	-24.6%	-15.4%	-2.5%	-12.9%	-9.2%
Credit Intermediation and Related Activities	772	-24.4%	-11.0%	-2.5%	-8.5%	-13.4%
Securities, Commodity Contracts, and Other Financial Investments and Related Activities	122	10.9%	7.9%	-2.5%	10.4%	3.0%
Insurance Carriers and Related Activities	486	-30.1%	-23.4%	-2.5%	-20.9%	-6.6%
Real Estate and Rental and Leasing	765	3.9%	-0.3%	-2.5%	2.2%	4.2%
Real Estate	624	14.7%	4.6%	-2.5%	7.1%	10.1%
Rental and Leasing Services	139	-25.7%	-11.9%	-2.5%	-9.4%	-13.8%
Professional, Scientific, and Technical Services	1,543	-0.2%	-2.0%	-2.5%	0.5%	1.8%
Professional, Scientific, and Technical Services	1,543	-0.2%	-2.0%	-2.5%	0.5%	1.8%
Management of Companies and Enterprises	444	4.7%	-1.3%	-2.5%	1.2%	6.0%
Management of Companies and Enterprises	444	4.7%	-1.3%	-2.5%	1.2%	6.0%
Administrative and Support and Waste Management and Remediation Services	2,188	-0.1%	12.5%	-2.5%	15.0%	-12.7%
Administrative and Support Services	2,067	0.2%	10.8%	-2.5%	13.3%	-10.6%
Waste Management and Remediation Services	122	-4.7%	38.4%	-2.5%	40.9%	-43.0%
Educational Services	732	-9.0%	8.4%	-2.5%	10.9%	-17.3%
Educational Services	732	-9.0%	8.4%	-2.5%	10.9%	-17.3%
Health Care and Social Assistance	8,848	3.9%	8.7%	-2.5%	11.2%	-4.7%
Ambulatory Health Care Services	3,268	7.7%	21.1%	-2.5%	23.6%	-13.4%
Hospitals	1,500	-11.3%	-10.2%	-2.5%	-7.7%	-1.1%
Nursing and Residential Care Facilities	2,557	22.3%	10.4%	-2.5%	12.9%	12.0%
Social Assistance	1,524	-10.3%	7.0%	-2.5%	9.5%	-17.3%
Arts, Entertainment, and Recreation	798	4.6%	0.7%	-2.5%	3.2%	3.9%
Performing Arts, Spectator Sports, and Related Industries	286	58.0%	13.6%	-2.5%	16.1%	44.4%
Museums, Historical Sites, and Similar Institutions	54	-19.4%	9.4%	-2.5%	11.9%	-28.8%
Amusement, Gambling, and Recreation Industries	458	-11.1%	-6.2%	-2.5%	-3.6%	-4.9%
Accommodation and Food Services	6,470	3.5%	7.5%	-2.5%	10.0%	-4.0%
Accommodation	1,953	-3.0%	-3.2%	-2.5%	-0.7%	0.2%
Food Services and Drinking Places	4,517	6.6%	10.4%	-2.5%	12.9%	-3.8%
Other Services (except Public Administration)	1,997	-3.7%	1.0%	-2.5%	3.6%	-4.8%
Repair and Maintenance	654	27.7%	10.9%	-2.5%	13.4%	16.8%
Personal and Laundry Services	631	4.0%	4.7%	-2.5%	7.2%	-0.7%
Religious, Grantmaking, Civic, Professional, and Similar Organizations	660	-23.5%	-6.7%	-2.5%	-4.2%	-16.9%
Private Households	52	-42.9%	-16.6%	-2.5%	-14.1%	-26.3%
Total, All Government	13,008	-9.3%	-9.2%	-2.5%	-6.7%	-0.1%
Federal Government	439	-6.0%	-8.8%	-2.5%	-6.3%	2.8%
State Government	3,844	-7.6%	-14.2%	-2.5%	-11.7%	6.6%
Local Government	8,725	-10.1%	-7.7%	-2.5%	-5.2%	-2.5%
Unclassified	113	113.2%	73.5%	-2.5%	76.0%	39.7%

Location Quotients

Table 9 displays location quotients for various sectors in the Ulster County economy. Location quotients are calculated to compare employment in a certain industries between each county in Connecticut, and the state as a whole. A “location quotient” is calculated as the percent of employment in a specific industry in an individual county divided by the percent of employment in that industry statewide. A location quotient above 1.0 implies that an industry’s employment or output exceeds local demand and thus has net exports and brings wealth into the region. A location quotient below 1.0 suggests that an industry is not meeting local demand and the region thus depends on goods and services imported into the area. The location quotients in the table compare the concentration of that industry in each county to the concentration of employment in that industry in New York State as a whole.

Note that the results of the location quotient analysis roughly corresponds to the shift/share analysis provided in the previous section. Ulster shows strength in beverage manufacturing, textiles, and several other manufacturing sectors. Note that the County has a relatively low concentration in professional and technical services. On the other hand, while the County’s location quotient for performing arts and spectator sports is below 1 (0.81), it is the highest among the counties in the region. It could be that the extraordinarily high concentration of this sector in New York City artificially suppresses the location quotient and Ulster has a higher concentration in this sector compared to comparable counties outside the industry centers of New York State and California. In addition to the strengths in the accommodations sector, Ulster shows a concentration in repair and maintenance services, a sector which also showed strength in the shift/share analysis.

It is worth noting the strength that Ulster shows in agricultural employment. These results should be used with caution in that this data series (the Quarterly Census of Employment and Wages) is not the major source for recording agricultural employment. Nonetheless, the results do suggest that this is a potential growth area for the County.

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 9.

Industry Title	Average Employment, Ulster County			Location Quotients, 2013 (vs. NYS)				
	2008	2013	%Change	Ulster	Dutchess	Greene	Orange	Sullivan
Total, All Industries	60,382	57,207	-5.30%	1	1	1	1	1
Total, All Private	46,047	44,199	-4.00%	0.92	0.97	0.83	0.96	0.91
Agriculture, Forestry, Fishing and Hunting	899	938	4.30%	5.87	2.09	1.95	2.58	4.53
Crop Production	657	731	11.30%	9.5	2.12	2.3	4.07	NA
Manufacturing	4,026	3,364	-16.40%	1.12	1.77	1.17	1.13	1.17
Food Manufacturing	409	367	-10.30%	1.06	0.46	0.24	1.2	8.1
Beverage and Tobacco Product Manufacturing	65	169	160.00%	3.6	NA	NA	1.62	NA
Textile Mills	D	33	NA	1.34	NA	NA	1.93	NA
Textile Product Mills	118	109	-7.60%	4.05	NA	NA	2.72	NA
Wood Product Manufacturing	161	52	-67.70%	1.05	1	NA	2.18	0.61
Nonmetallic Mineral Product Manufacturing	171	238	39.20%	2.4	1.16	1.49	1.75	0.8
Machinery Manufacturing	919	866	-5.80%	3.08	0.55	NA	0.35	NA
Professional, Scientific, and Technical Services	1,546	1,543	-0.20%	0.38	0.48	0.29	0.54	0.25
Nursing and Resid. Care Facilities	2,090	2,557	22.30%	1.64	1.77	1.28	0.96	4.33
Arts, Entertainment, and Recreation	763	798	4.60%	0.79	0.93	2.97	0.8	1.48
Performing Arts, Spectator Sports, and Related Industries	181	286	58.00%	0.81	0.56	0.2	0.4	NA
Museums, Historical Sites, and Similar Institutions	67	54	-19.40%	0.48	0.39	NA	0.45	0.18
Amusement, Gambling, and Recreation Industries	515	458	-11.10%	0.83	1.27	5.34	1.14	1.89
Accommodation and Food Services	6,251	6,470	3.50%	1.44	1.01	1.52	0.9	1
Accommodation	2,013	1,953	-3.00%	3.32	0.84	4.12	0.71	3.76
Food Services and Drinking Places	4,238	4,517	6.60%	1.16	1.04	1.13	0.92	0.59
Other Services (except Public Administration)	2,074	1,997	-3.70%	0.89	0.85	0.72	1.02	1.02
Repair and Maintenance	512	654	27.70%	1.69	1.49	1.28	1.75	1.19

Firms by Size

Figures 3-5 below show how the number of employees per firm in Ulster County compares to the firms in the Mid-Hudson Region, upstate (the State minus New York City and Long Island) and the State as a whole for selected sectors. Figure 3 shows firms by size for all sectors in 2013, with no distinguishable difference in the distributions of firms by size in each of the areas included in the figure.

Ulster County is distinguished in the arts sector by having a slightly higher concentration of firms with fewer than four employees in that sector compared with elsewhere (c.f., Figure 4). As shown in Figure 5, manufacturing firms seem evenly distributed by size across all of the areas under study. However as shown in Table 11, there are several sectors within manufacturing where the average size of firms is different for Ulster County than for the other areas under study.

In Ulster County, textile product mills, machinery manufacturing and electrical equipment manufacturing all tend to have more employees per firm than New York State as a whole. For the most part, the manufacturers in Ulster pay less than manufacturers statewide. This may reflect the concentration of many of these firms in major metropolitan areas in which costs of living tend to drive up wages and thereby boost average wages as reported statewide.

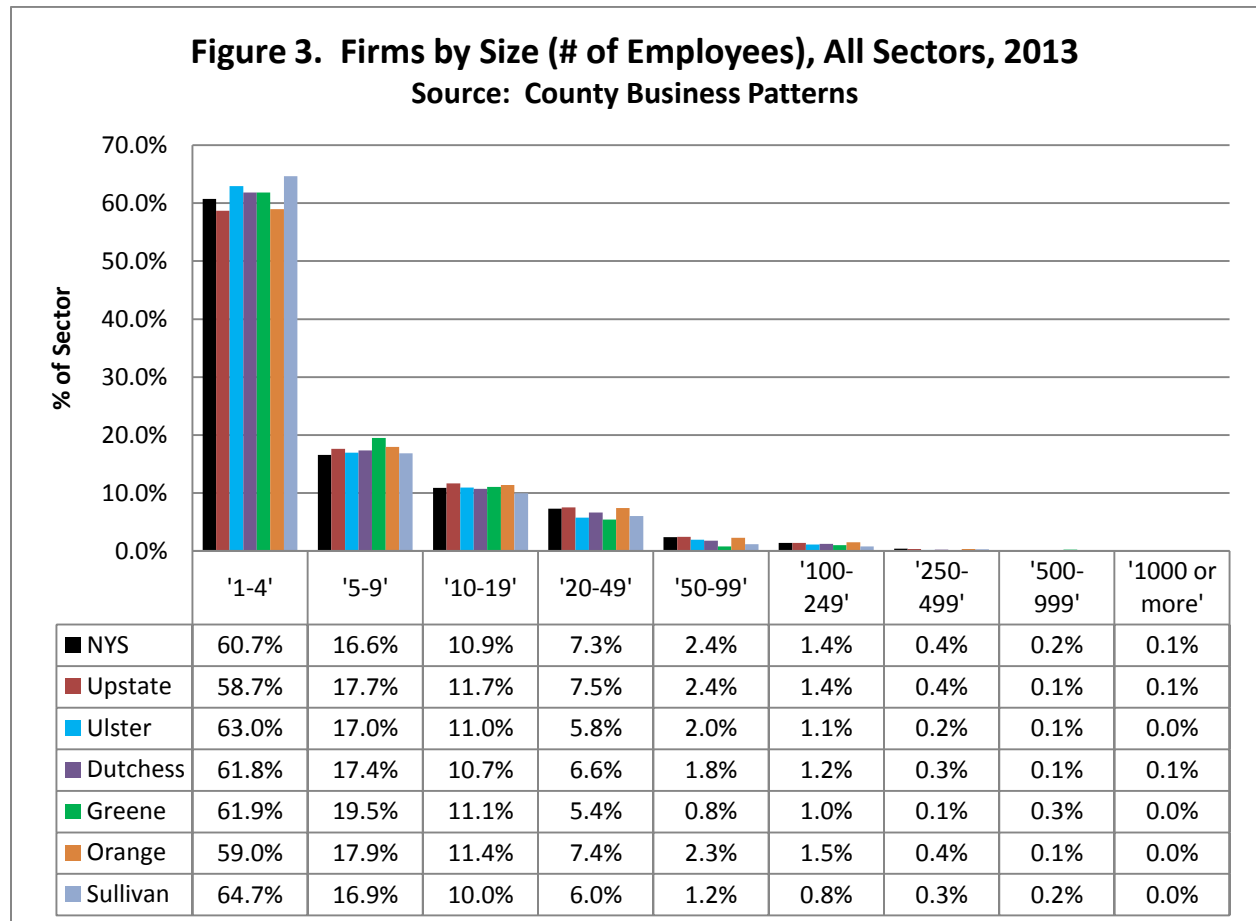


Figure 4. Firms by Size (# of Employees), Arts, Entertainment & Recreation, 2013

Source: County Business Patterns

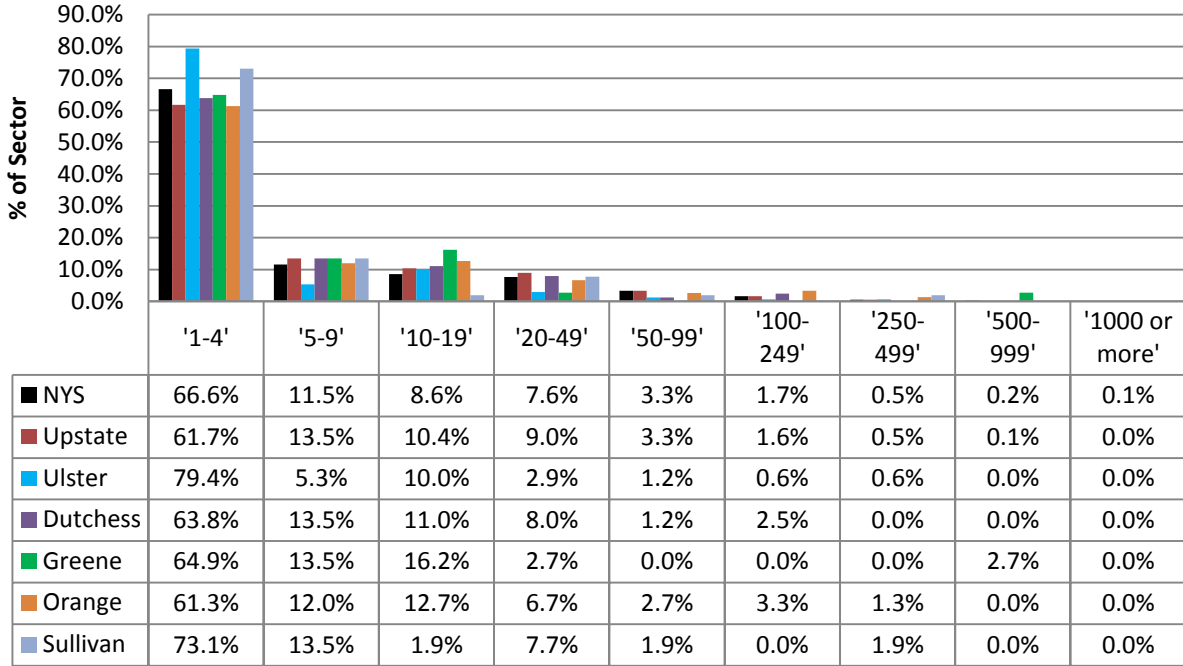
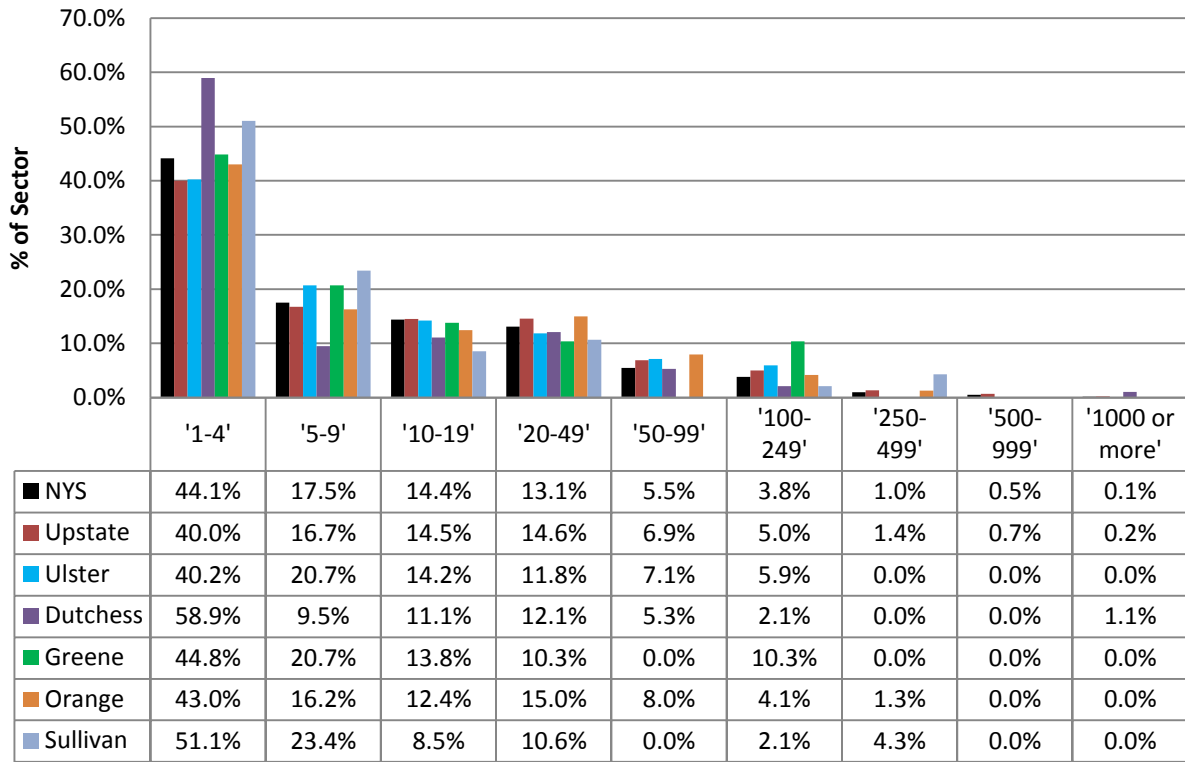


Figure 5. Firms by Size (# of Employees), Manufacturing, 2013
 Source: County Business Patterns



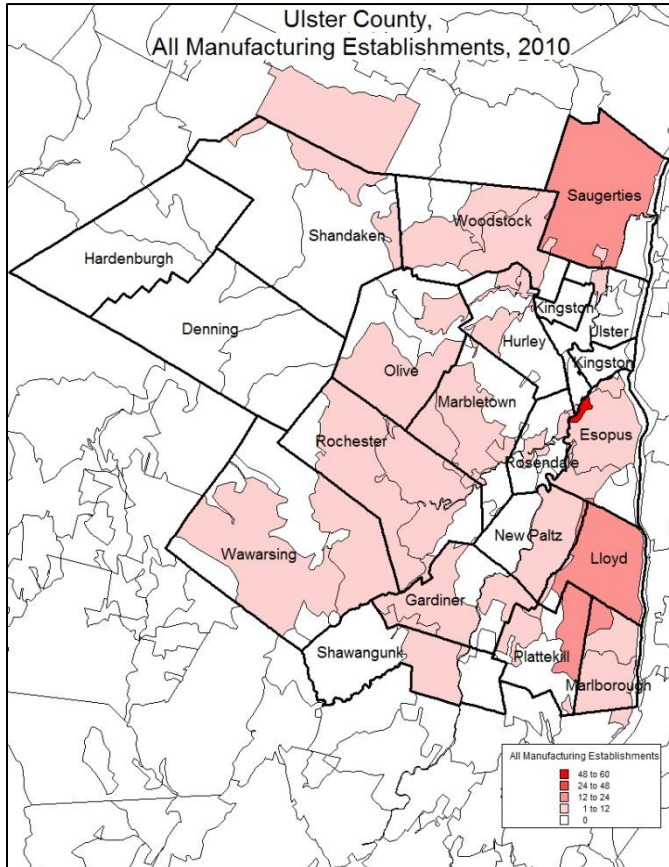
Manufacturers by size

Industry Title	Average Firm Size		Average Wages		Ulster County	
	NYS	Ulster Co.	NYS	Ulster Co.	Estabs.	Employment
Manufacturing	26.06	18.28	\$61,232	\$ 45,083	184	3364
Food Manufacturing	23.10	12.66	\$41,428	\$ 22,620	29	367
Beverage and Tobacco Product Manufacturing	23.37	24.14	\$64,473	\$ 42,878	7	169
Textile Mills	14.91	8.25	\$57,367	\$ 22,879	4	33
Textile Product Mills	11.54	27.25	\$47,341	\$ 31,504	4	109
Apparel Manufacturing	14.54	5.20	\$47,644	\$ 26,607	5	26
Wood Product Manufacturing	14.87	5.78	\$39,010	\$ 28,795	9	52
Printing and Related Support Activities	12.65	11.50	\$48,560	\$ 32,888	8	92
Chemical Manufacturing	64.12	32.25	\$76,129	\$ 51,553	4	129
Plastics and Rubber Products Manufacturing	45.11	32.67	\$49,955	\$ 48,208	3	98
Nonmetallic Mineral Product Manufacturing	22.43	26.44	\$55,382	\$ 43,587	9	238
Fabricated Metal Product Manufacturing	21.93	11.45	\$53,260	\$ 45,335	29	332
Machinery Manufacturing	41.32	61.86	\$71,269	\$ 59,660	14	866
Computer and Electronic Product Manufacturing	62.56	12.11	\$93,057	\$ 46,620	9	109
Electrical Equipment, Appliance, and Component Manufacturing	39.42	97.00	\$60,532	\$ 51,409	3	291
Transportation Equipment Manufacturing	54.12	20.33	\$67,949	\$ 54,504	3	61
Furniture and Related Product Manufacturing	13.00	5.06	\$43,688	\$ 39,448	16	81
Miscellaneous Manufacturing	15.18	9.48	\$56,943	\$ 33,425	23	218

Ulster County Industry Targeting Study
Technical Memorandum: Existing Conditions Analysis

In addition to their relative small sizes, Ulster County manufacturers are distributed throughout the County. The map in Figure 6 provides an overview of the location of manufactures in the County by ZIP code as of 2010. Additional maps for particular manufacturing sectors can be found in the Ulster County Shovel Ready Strategy prepared in 2013.⁴

Figure 6.



Source: US Census Bureau, *ZIP Code Business Patterns, 2010*,

⁴ Ulster County Planning Department. *Ulster County Shovel Ready Strategy*, February, 2013,

Buyer/Supplier Linkages in Ulster County and New York State

Part of understanding a local economy involves identifying the suppliers and customers of firms in the economy. This can sometimes identify opportunities for business attraction. For example, a particular industry (printing, for example) may rely on a certain industry for supplies (in the case of printing, ink manufacturers). In that case, if a local economy has a sizeable printing sector, but no ink manufacturers, it may be advantageous for an ink manufacturer to locate to the area, providing it with better access to market while also strengthening the local supply network for the printers.

A systematic way of reviewing these supplier customer relationships can be done by examining the input/output multipliers for a local economy. These multipliers are often used to create economic impact analyses by showing how spending in one industry has a ripple effect on a local economy as firms in that industry use money they receive to purchase goods and services. In that way, the multipliers trace the supplier customer links between industries. The analysis examines the buyer supplier links that exist locally (i.e., in Ulster County). It then examines those same buyer/supplier links at the State level to determine if there are major buyers or suppliers for that industry at the State level that do not exist locally. In some cases, the suppliers or buyers may not exist locally because that type of industry operates from a central location or is located close to important sources of raw material. In others, the absence of the buyer or supplier at the local level may represent an attraction opportunity for the local economy.

In this case, the analysis examined industries in Ulster County Type 1 multipliers from the IMPLAN input/output model, identifying the top 15 industries from which each industry purchased goods or services to meet demand for its product or service. The analysis showed that, for the most part, industries in Ulster County rely upon external suppliers for raw materials that would not easily be relocated to the County: primary metal manufacturing, large scale production agriculture, and specialized industry-specific services for which insufficient demand would be found among Ulster County businesses alone. The one potential exception to this rule may be machine shops. This industry appears as a supplier statewide in a wide variety of manufacturing sectors that are present in the County, but often do not appear in list of 15 local suppliers for the industry in Ulster County. It may be the case that these are also specialized firms that must serve a large geographic area to capture sufficient business to be profitable. On the other hand, as the County's economy grows, it is important to monitor the growth in demand for machining to see if firms in that supplying industry may eventually find the County an increasingly attractive place from which to do business. Table 11 identifies the many industries that are located in Ulster County to which purchase goods and services from the machine tool industry. The detailed analyses of supplier links are shown in Table 12 in the appendix to this document.

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

Table 11. Industries Located in Ulster County which purchase goods & services from Machine Shops
Other rubber product manufacturing
Other aluminum rolling, drawing and extruding
Plate work manufacturing
Metal window and door manufacturing
Sheet metal work manufacturing
Ornamental and architectural metal work manufacturing
Construction machinery manufacturing
Oil and gas field machinery and equipment manufacturing
All other industrial machinery manufacturing
Industrial mold manufacturing
Other electronic component manufacturing
Totalizing fluid meter and counting device manufacturing
Watch, clock, and other measuring and controlling device manufacturing
All other miscellaneous manufacturing
Source: Compiled by Fairweather Consulting using data from the Minnesota Implan Group, Type 1 Multipliers for Ulster County & NYS, 2015.

The physical infrastructure assets of Ulster County

The physical infrastructure in an economy provides the “platform” on which businesses operate. This can include such assets as road, rail, air, water, sewer, and telecommunications broadband. This type of infrastructure is particularly important major development projects that require substantial service in terms of transportation electricity, water and waste water, etc. The various aspects of Ulster County’s infrastructure are summarized below. The analysis confirms that, from the perspective of major development projects, the areas best served by infrastructure are in 3 general locations, listed from North to South: Saugerties, the City of Kingston/Town of Ulster and New Paltz. As the analysis shows, there are other locations that could also support (or already do support) substantial employment activity, but these are the three locations best served by existing infrastructure

Transportation Access: Access to markets is a key consideration for industry. In most cases, the “gold standard” for transportation access is an interchange on an Interstate highway. Ulster County has three interchanges off of Interstate 87, the New York State Thruway. They are Exit 20 in the Town of Saugerties, Exit 19 in the City of Kingston/Town of Ulster and Exit 18 in the Town of New Paltz.

Other highways of importance include:

US 209 which links Kingston in the north with Ellenville in the southwestern portion of the County

US 9-W which parallels the Hudson River across the eastern edge of the County

US 44 which makes an east/west connection across the southern portion of the County from Lloyd to Wawarsing

NYS 28 which links the Kingston/Ulster area with point to the northwest

NY 32 which runs roughly parallel to US 9-W to its west linking Saugerties in the north with Marlborough to the south.

The County also has freight rail service via the CSX West Shore line. According to a 2008 analysis for the Ulster County Transportation Council, “The CSX West Shore Line (River Line) is one of the most intensively-used single track freight corridors in the U.S. It serves as the primary freight conduit between the South, New Jersey and New England points. The River Line connects major classification yards in New Jersey with Selkirk Yard, southwest of Albany, which handles the majority of freight entering New England.”⁵ There are several industry spurs on the corridor serving locations in Kingston.

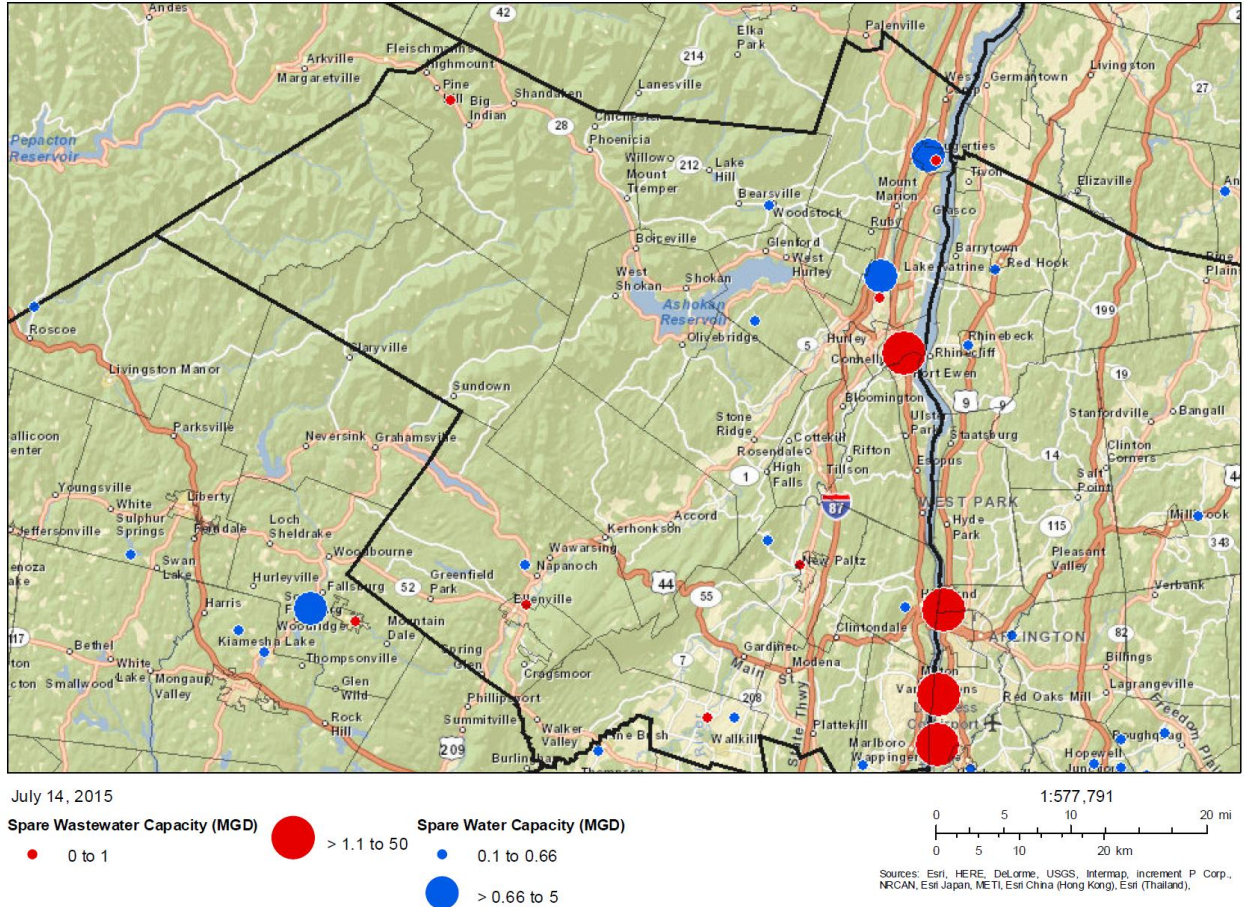
Sewer & Water Infrastructure: A recent report by Hudson Valley Pattern for Progress provided an overview of sewer and water capacity in the region.⁶ The map in Figure > summarizes the results of their analysis. In terms of wastewater capacity, the locations with the greatest capacity in Ulster County are Saugerties and the City of Kingston with additional (albeit smaller capacities) available in Ulster, New Paltz, Ellenville, Pine Hill and Shawangunk. The greatest available capacity for public water supplies are in the Village of Saugerties, the Town of Ulster Water District, with smaller capacity of public water available through other municipal systems throughout the County as shown in Figure 7.

⁵ Ulster County Transportation Council, *Ulster County Integrated Advance Train Detection and Arrival Prediction Implementation Plan: Final Report and Implementation Plan*, 2008, page 1.

⁶ Hudson Valley Pattern for Progress. *Hudson Valley Infrastructure: Is it Safe? Is it Fair? Is it Informed?*. May 2015.

Figure 7.

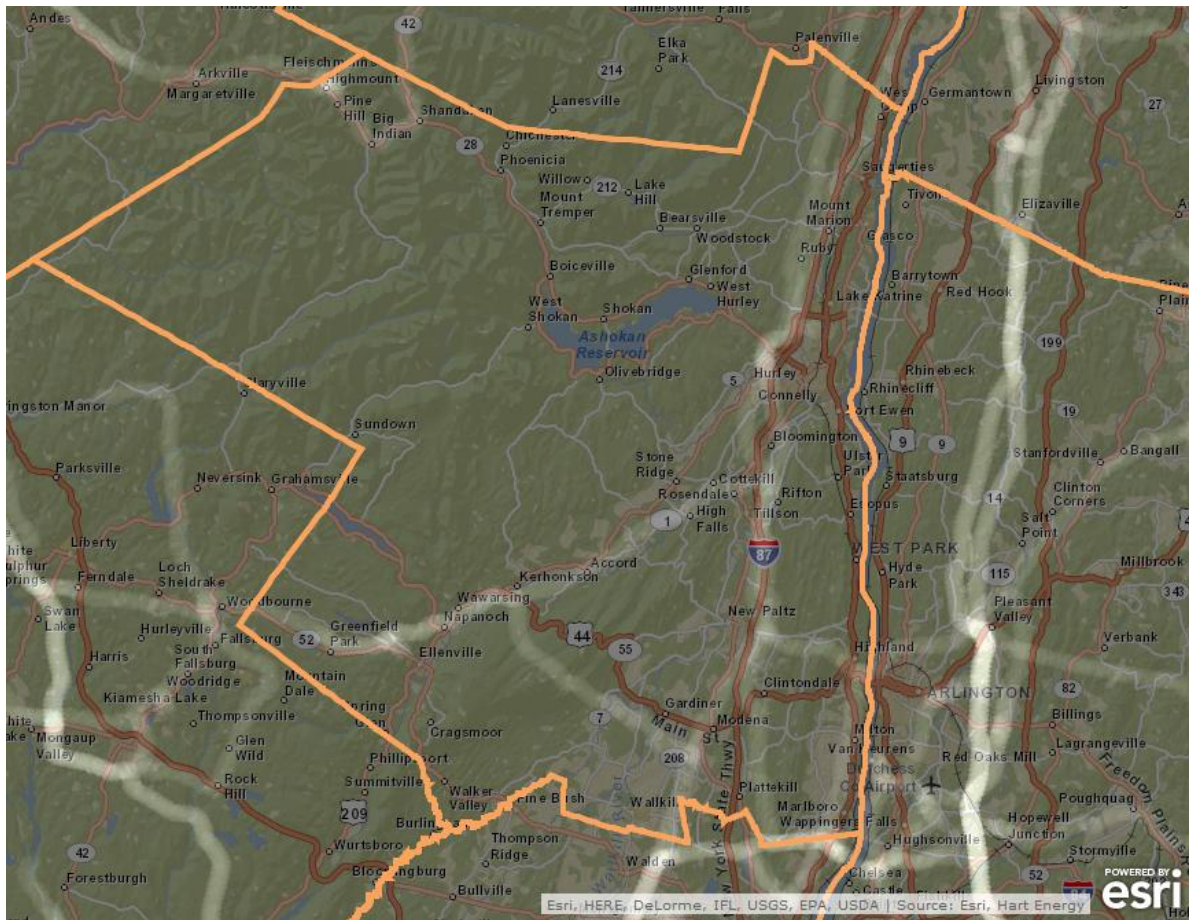
Public Sewer & Water Capacity



Source: <http://www.arcgis.com/apps/Viewer/index.html?appid=ff00d51271d34b36b67f2a5ee7e608b1>

Electric Power: As shown in Figure 8, the major electrical transmission lines in the County run parallel to the major highways. In this case, the areas adjacent to the I-87 corridor have the readiest access to the power grid, reinforcing the attractiveness of locations near the County’s three interchanges as locations for any major development projects.

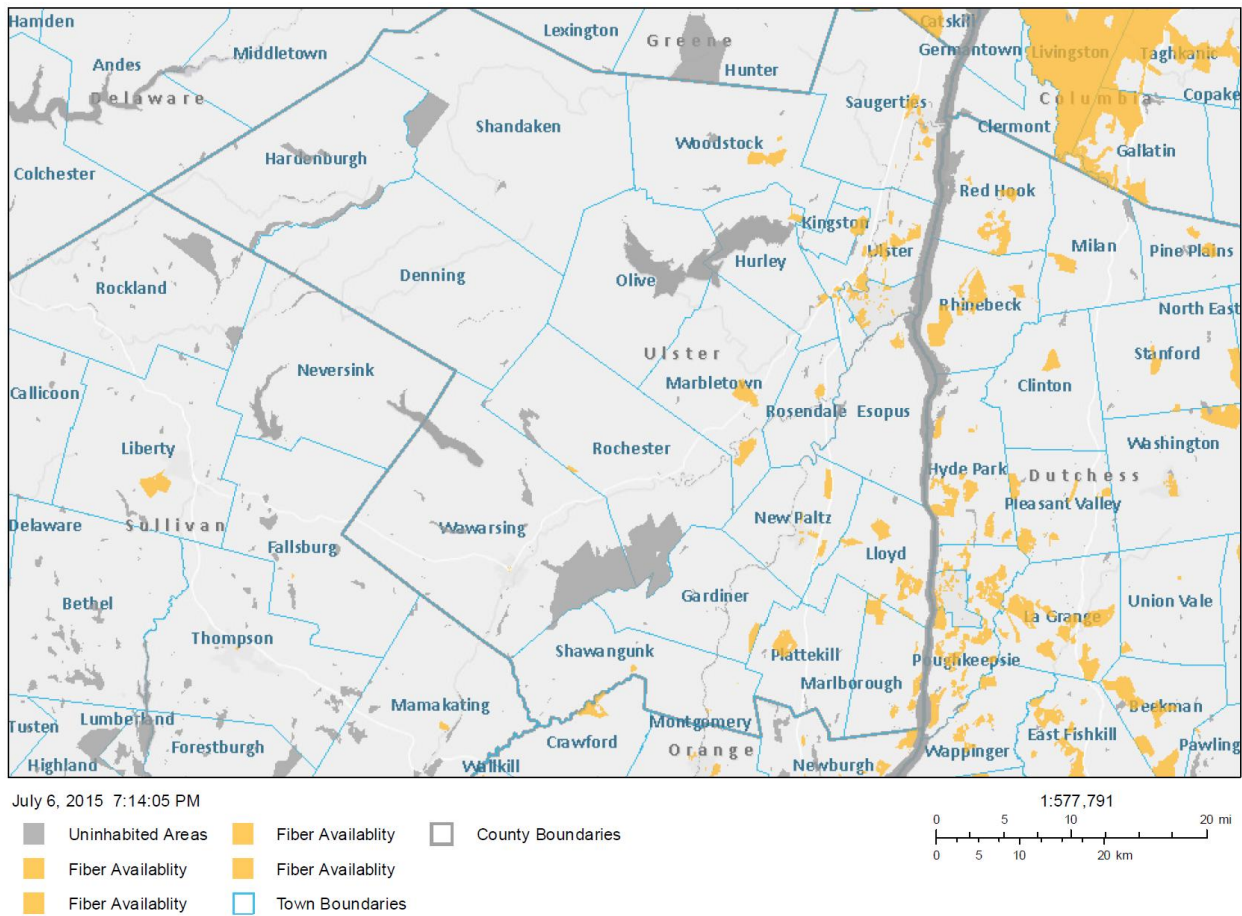
Figure 8. Major Electric Power Lines, Ulster County.



Telecommunication Infrastructure

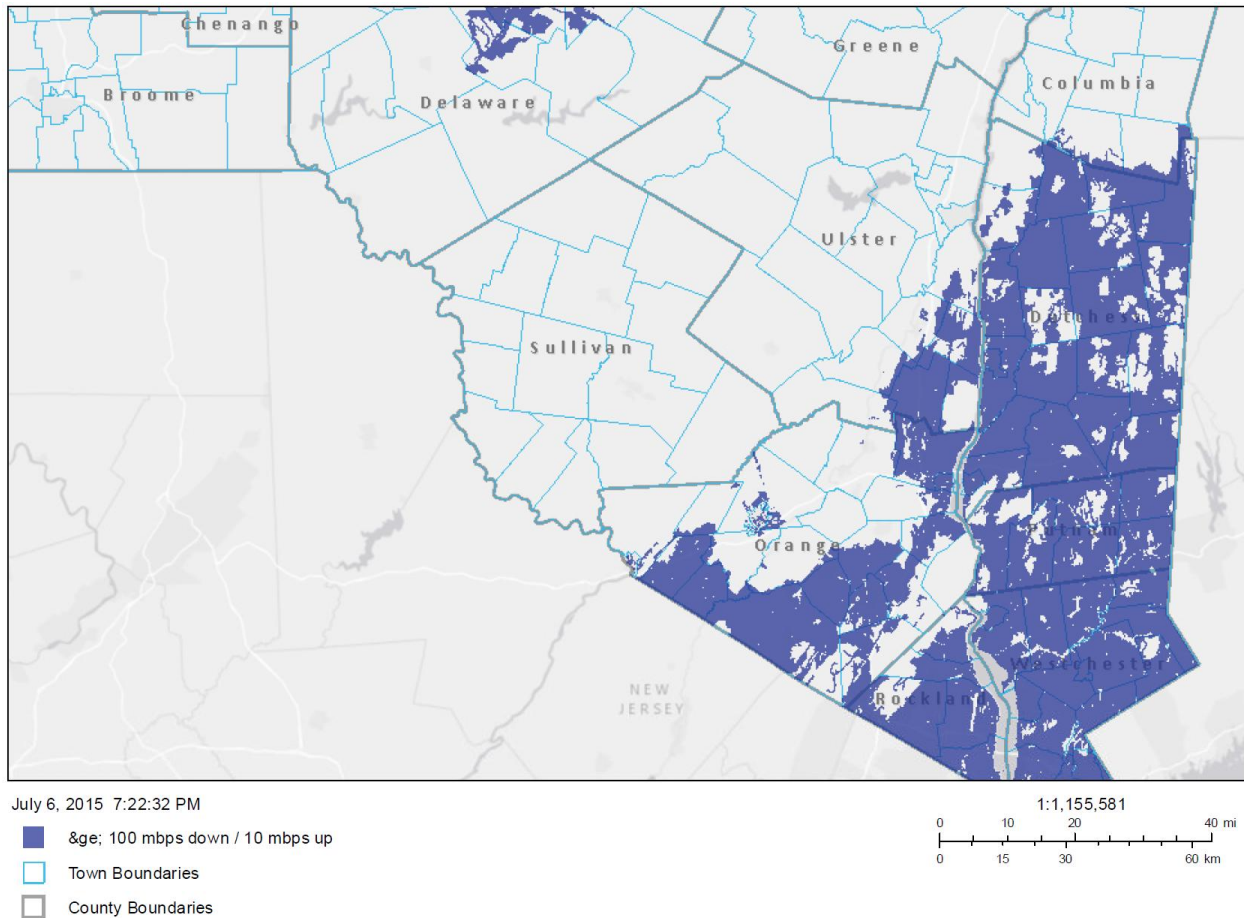
Over the last 20 years telecommunications has emerged as an important piece of economic development infrastructure, rivaling high way access as an attraction for business. This infrastructure serves economic development in two ways. First, the presence of high speed fiber optic transmission lines can be an important asset for companies that transmit large amounts of data as part of their business. Second, high speed Internet access is important to support small businesses, telecommuters and other individuals working in remote locations. Figures 9 and 10 provide an overview of Ulster County’s condition in terms of these two types of service. Figure >>> shows those location in the County with business only fiber networks operating as speeds of 10 megabytes per second or higher. Such service is concentrated in the eastern portion of the County and, once again, largely coincides with the I-87 corridor.

Figure 9. Business Only Fiber Networks, 10 mbps or higher.



Ulster County Industry Targeting Study
Technical Memorandum: Existing Conditions Analysis

Figure 10. High Speed Access, Business & Residential Service



Source: <http://www.broadbandmap.ny.gov/map/>

Figure 10 shows areas served by high speed business and residential service in Ulster County and the larger region. The southeastern portion of the County has the greatest extent of service of this type. Even more to the point is the extent to which such service is more widespread in Dutchess County and points south, than in Ulster.

Educational Institutions:

Given the importance of workforce and technological innovation to the 21st Century economy, institutions of higher education have emerged as important components of economic development infrastructure. There are two important institutions serving Ulster County: SUNY-Ulster and the State University of New York at New Paltz. Both have substantial resources to contribute to Ulster County's economy.

According to the SUNY-Ulster website,

SUNY Ulster has been cited in three different areas as an important contributor in the Hudson Valley region's role in New York State's economic future. In a report commissioned by SUNY Chancellor Nancy L. Zimpher and conducted jointly by the Nelson A. Rockefeller Institute of Government and the University at Buffalo Regional Institute, SUNY Ulster was singled out for its contributions through the Small Business Development Center (SBDC), the Clean Energy Technology Training (CETT) Consortium and through its role in the Hudson Valley Education Consortium. . . .

SUNY Ulster also hosts the Darlene L. Pfeiffer Center for Entrepreneurial Studies which brings together students, faculty, alumni, entrepreneurs, business leaders, mentors, and government agencies to work together on entrepreneurial projects, with an emphasis on technology and sustainability.⁷

The State University of New York at New Paltz also has an array of business-related offerings beyond its academic programs in Business Administration, Electrical Engineering, Mechanical Engineering and Computer Science. For example the Hudson Valley Advanced Manufacturing Center provides opportunities for businesses and individuals to have access to the latest technology in digital design and fabrication (i.e., 3 dimensional printing). According to the campus website:

3D printing at SUNY New Paltz integrates the College's strengths in engineering, computer science, technology, and the innovation and creativity of the arts. The organizational home of this effort is the Hudson Valley Advanced Manufacturing Center at SUNY New Paltz. Launched in May 2013, the center brings state-of-the-art 3D printing equipment to the region and a curriculum in [Digital Design and Fabrication](#), giving rise to powerful forces—art and technology, creativity and ingenuity. Additional elements of the initiative include: active recruitment of 3D printing enterprises, with access to venture capital funds and potential for participation in the Governor's Start-Up NY tax incentive program; and a network of equipment access and collaborative educational programming at Hudson Valley community colleges and select high schools to expand 3D printing capability in the region.⁸

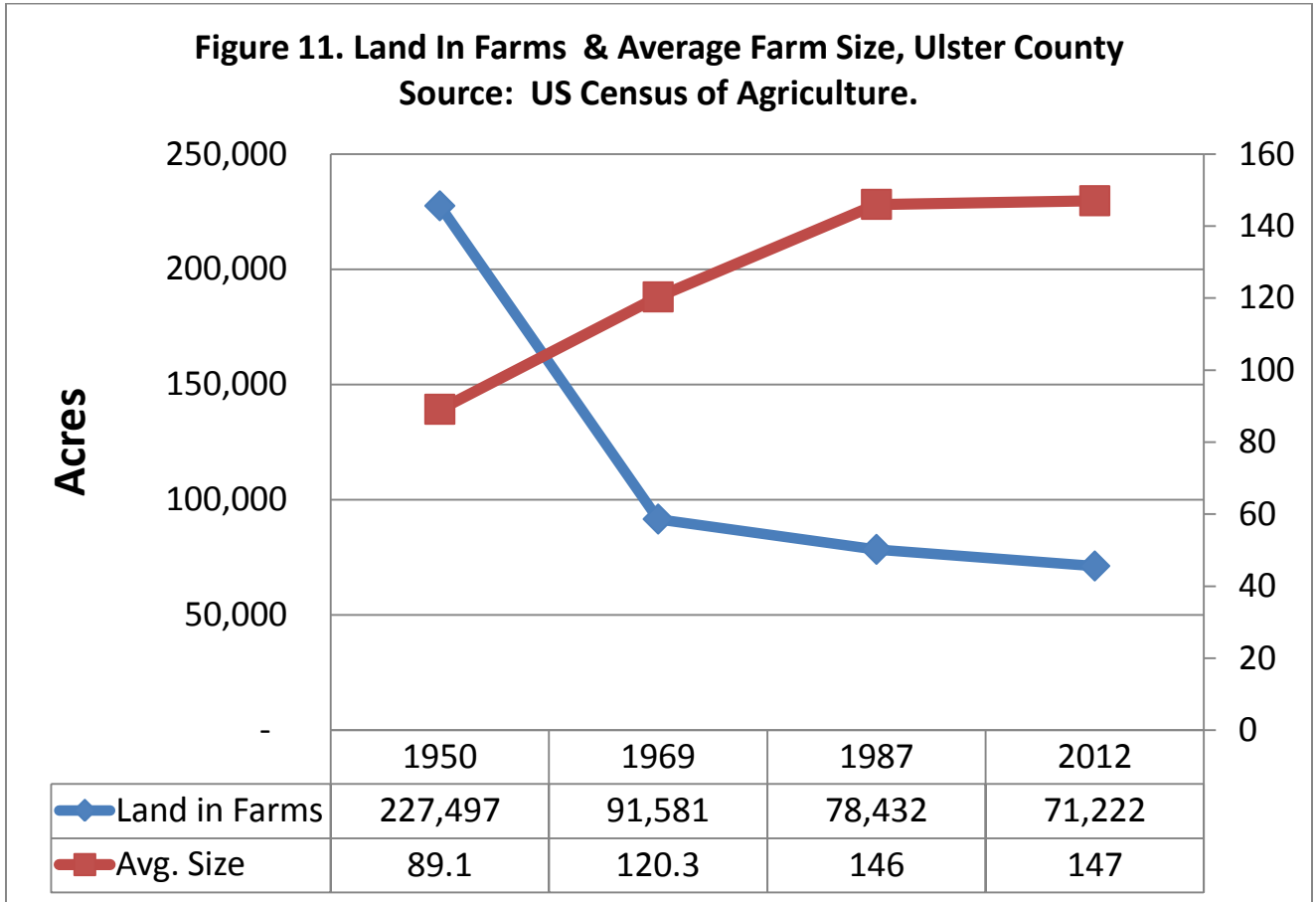
⁷ https://www.sunyulster.edu/economic_development/

⁸ <http://www.newpaltz.edu/3d/>

Both campuses are also participating in StartUp NY, which provides substantial economic incentives for small and start-up businesses to locate on or near SUNY campuses and draw upon campus resources to create new jobs.

Agriculture: Time of transition.

For a County with a significant presence in beverage and food manufacturing, Ulster’s agricultural base can be thought of as an important part of its economic development infrastructure.



According to figures from the Census of Agriculture, Ulster County had its major loss of farmland in the period from 1950 to 1969, when land in farms dropped by 60 percent from 227,497 acres in 1950 to only 91,581 acres in 1969 (c.f., Figure 11). Livestock and dairy operations virtually disappeared during that time and were accompanied by declines in feed crops, vegetables and other commodities. In general operations were consolidated in to more efficient units, as average farm size rose from 89.1 acres in 1950 to 120.3 acres by 1969. In some ways, the “land in farms” figure overstates the loss. That data includes acreage in woodlots and other uses that were often sold off and farmers concentrated their operation on the land in production. Note also that, throughout that time, the County emerged as a leading apple producer, and remains third in New York State in terms of produced.

While the loss of land in farms has continued, the rate of decline has dramatically tapered off as the land that remains in farms tends to be the most productive soils and the operators remaining in farming tend to be the best managers of farm operations. According to the 2012 Census of Agriculture, the County has 71,222 acres in farms, a drop of 10 percent over 43 years. Consolidation of operations continued over that span and average farm size is now 150 acres.

The fact that the average farm size has stabilized at around 150 acres is an indication of an important change taking place in agriculture in Ulster County and beyond: increased opportunities in specialty agriculture. In the post war era, the emphasis in agriculture has been on commodity production: producing uniform quality goods at the lowest possible costs. Over the last 20 years, there has been increasing emphasis on specialty segments in agriculture focusing on local foods and other specialized niches (e.g., organics). These specialty operations seek to produce higher quality/higher value added goods and therefore do not face the same pressure for ever greater consolidation that is a fact of life for commodity producers. Although still a small segment of overall agriculture production, these segments are growing rapidly. Within 100 miles of New York City—one of the largest markets for such specialty production—Ulster County is uniquely positioned to take advantage of this emerging trend in food and food products.

The opening of the Hudson Valley Farm Hub at the site of the former Gill Farm in Hurley presents opportunities for Ulster County growers and food processors. As described in a recent report, the food hub movement is intended to help farmers and processors become more competitive in this new type of food industry:

Although there has been progress in recent years in building consumer awareness about food, expanding direct-to-consumer market venues, and enacting policies to support local and regional food systems, many researchers and practitioners have concluded additional focus must be made on scaling up these efforts. The dialog among these researchers and practitioners is now focused on the means for increasing the scale of local food systems and helping small and mid-sized farmers access larger volume, wholesale markets. Past research has concluded that doing so will require a greater focus on aggregation, processing, and distribution infrastructure to better connect farmers in the local food system to these new market outlets. Food hubs have arisen as one means for addressing the need for infrastructure to scale up local food distribution and assist small and midsized farms access new markets.⁹

⁹ Hudson Valley Pattern for Progress. *Hudson Valley Food Hub Initiative*. Local Economies Project, New World Foundation, April, 2013,

Appendix: Detailed Table of Type 1 Multipliers

In the case of supplier analysis, for each industry highlighted in Table 12, the right hand column shows the Type 1 multiplier for the sector listed in that row as it relates to the industry given in the title of the table. (In an input/output model, this multiplier shows the proportion of demand income to the industry in the table title that is then allocated to the row industries to meet that demand.) In the customer analysis, the multiplier shown indicates the proportion of income the row industry allocates to the title industry to meet demand for its products

Table 12. Ulster County Industries with Top Supplying Industries not Located in the County

4 Fruit Farming

172	Pesticide and other agricultural chemical manufacturing	0.00854386
12	Dairy cattle and milk production	0.00331941
526	Other local government enterprises	0.0025546
461	Management of companies and enterprises	0.00172182
448	Accounting, tax preparation, bookkeeping, and payroll services	0.00151724

6 Greenhouse, nursery, and floriculture production

172	Pesticide and other agricultural chemical manufacturing	0.0034564
50	Natural gas distribution	0.00261381
437	Insurance carriers	0.00237166
195	Other plastics product manufacturing	0.00219263
20	Extraction of natural gas and crude petroleum	0.00182187
12	Dairy cattle and milk production	0.0014958

10 All other crop farming

172	Pesticide and other agricultural chemical manufacturing	0.01697232
526	Other local government enterprises	0.00626074
12	Dairy cattle and milk production	0.00431176
434	Nondepository credit intermediation and related activities	0.00403625
461	Management of companies and enterprises	0.00336215

11 Beef cattle ranching and farming, including feedlots and dual-purpose ranching and

farming

66	Other animal food manufacturing	0.03692314
2	Grain farming	0.0094393
435	Securities and commodity contracts intermediation and brokerage	0.00476086
410	Water transportation	0.00362821
248	Spring and wire product manufacturing	0.00344277
20	Extraction of natural gas and crude petroleum	0.00318631
461	Management of companies and enterprises	0.00311336

12 Dairy cattle and milk production

66	Other animal food manufacturing	0.07324328
2	Grain farming	0.00844429
172	Pesticide and other agricultural chemical manufacturing	0.00429197
461	Management of companies and enterprises	0.0042777

13 Poultry and egg production

66	Other animal food manufacturing	0.15132478
2	Grain farming	0.01111469
67	Flour milling	0.00506276
410	Water transportation	0.00439762
461	Management of companies and enterprises	0.00430649

14 Animal production, except cattle and poultry and eggs

66	Other animal food manufacturing	0.01583502
437	Insurance carriers	0.00197445
2	Grain farming	0.00129884

15 Forestry, forest products, and timber tract production

12	Dairy cattle and milk production	0.02447331
66	Other animal food manufacturing	0.00779569
172	Pesticide and other agricultural chemical manufacturing	0.00685936
2	Grain farming	0.00450695

19 Support activities for agriculture and forestry

172	Pesticide and other agricultural chemical manufacturing	0.01802682
66	Other animal food manufacturing	0.00587108
169	Nitrogenous fertilizer manufacturing	0.00467909
461	Management of companies and enterprises	0.0035792
171	Fertilizer mixing	0.00262397

78 Confectionery manufacturing from purchased chocolate

149	Paperboard container manufacturing	0.01693289
75	Sugar cane mills and refining	0.01247077
12	Dairy cattle and milk production	0.00976702
159	Petroleum lubricating oil and grease manufacturing	0.00869081
100	Other snack food manufacturing	0.0068133

81 Canned fruits and vegetables manufacturing

102	Flavoring syrup and concentrate manufacturing	0.09743581
245	Metal cans manufacturing	0.015358
457	Advertising, public relations, and related services	0.0089925
149	Paperboard container manufacturing	0.00718038
50	Natural gas distribution	0.00561162

83 Dehydrated food products manufacturing

101	Coffee and tea manufacturing	0.01926074
149	Paperboard container manufacturing	0.01366359
50	Natural gas distribution	0.01097037
104	Spice and extract manufacturing	0.00825318

84 Fluid milk manufacturing

66	Other animal food manufacturing	0.02636128
102	Flavoring syrup and concentrate manufacturing	0.01770209
19	Support activities for agriculture and forestry	0.00923882

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

10	All other crop farming	0.0064931
457	Advertising, public relations, and related services	0.00601543

86 Cheese manufacturing

66	Other animal food manufacturing	0.02504485
19	Support activities for agriculture and forestry	0.00875674
10	All other crop farming	0.00592185
437	Insurance carriers	0.00450342

87 Dry, condensed, and evaporated dairy product manufacturing

66	Other animal food manufacturing	0.0199592
86	Cheese manufacturing	0.01226491
102	Flavoring syrup and concentrate manufacturing	0.0104678
50	Natural gas distribution	0.00707207
19	Support activities for agriculture and forestry	0.00698759
149	Paperboard container manufacturing	0.00678233

88 Ice cream and frozen dessert manufacturing

102	Flavoring syrup and concentrate manufacturing	0.04792555
149	Paperboard container manufacturing	0.01608118
457	Advertising, public relations, and related services	0.01070001
86	Cheese manufacturing	0.0065862

94 Bread and bakery product, except frozen, manufacturing

67	Flour milling	0.03551535
2	Grain farming	0.00736236
149	Paperboard container manufacturing	0.00614134
457	Advertising, public relations, and related services	0.00557102
409	Rail transportation	0.0048311

95 Frozen cakes and other pastries manufacturing

149	Paperboard container manufacturing	0.01281066
84	Fluid milk manufacturing	0.01063205
80	Frozen specialties manufacturing	0.00992342

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

67	Flour milling	0.00829123
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.0076776
12	Dairy cattle and milk production	0.00522664

97 Dry pasta, mixes, and dough manufacturing

67	Flour milling	0.10689963
2	Grain farming	0.01573052
149	Paperboard container manufacturing	0.01556931
84	Fluid milk manufacturing	0.01204036
75	Sugar cane mills and refining	0.01158059
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00984955

103 Mayonnaise, dressing, and sauce manufacturing

102	Flavoring syrup and concentrate manufacturing	0.03368031
12	Dairy cattle and milk production	0.01859201
13	Poultry and egg production	0.00837942
203	Glass container manufacturing	0.00796692
195	Other plastics product manufacturing	0.00778749
149	Paperboard container manufacturing	0.00625615
457	Advertising, public relations, and related services	0.00573504

105 All other food manufacturing

12	Dairy cattle and milk production	0.02048809
67	Flour milling	0.01127242
102	Flavoring syrup and concentrate manufacturing	0.00784538
457	Advertising, public relations, and related services	0.00775884
149	Paperboard container manufacturing	0.00649572

106 Bottled and canned soft drinks & water

102	Flavoring syrup and concentrate manufacturing	0.18893231
149	Paperboard container manufacturing	0.00789226
194	Plastics bottle manufacturing	0.00673269
457	Advertising, public relations, and related services	0.00672336

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00599983
-----	---	------------

109 Wineries

203	Glass container manufacturing	0.01570066
457	Advertising, public relations, and related services	0.01272196
309	Semiconductor and related device manufacturing	0.00809626
437	Insurance carriers	0.00809213

110 Distilleries

203	Glass container manufacturing	0.00597065
434	Nondepository credit intermediation and related activities	0.00163589
50	Natural gas distribution	0.00122431

113 Broadwoven fabric mills

117	Textile and fabric finishing mills	0.0179654
168	Artificial and synthetic fibers and filaments manufacturing	0.00871328
50	Natural gas distribution	0.00468173
457	Advertising, public relations, and related services	0.00463811
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00460554

114 Narrow fabric mills and schiffli machine embroidery

168	Artificial and synthetic fibers and filaments manufacturing	0.00824029
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.0058224
457	Advertising, public relations, and related services	0.00501678

15 Linked Industries Ulster County

50	Natural gas distribution	0.01216536
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00557591

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

457	Advertising, public relations, and related services	0.00547729
437	Insurance carriers	0.00532933
526	Other local government enterprises	0.00486511

119 Carpet and rug mills

168	Artificial and synthetic fibers and filaments manufacturing	0.01014801
112	Fiber, yarn, and thread mills	0.00326808
50	Natural gas distribution	0.00214395
115	Nonwoven fabric mills	0.0021188
457	Advertising, public relations, and related services	0.00161704

120 Curtain and linen mills

117	Textile and fabric finishing mills	0.00652573
457	Advertising, public relations, and related services	0.0050642
115	Nonwoven fabric mills	0.00494991
309	Semiconductor and related device manufacturing	0.00409989
437	Insurance carriers	0.0040358

121 Textile bag and canvas mills

no data for Ulster County

123 Other textile product mills

457	Advertising, public relations, and related services	0.00751031
437	Insurance carriers	0.00577035
117	Textile and fabric finishing mills	0.00559015
168	Artificial and synthetic fibers and filaments manufacturing	0.00534817
434	Nondepository credit intermediation and related activities	0.00462266

126 Cut and sew apparel contractors

457	Advertising, public relations, and related services	0.01282662
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00712597

128 Women's and girls' cut and sew apparel manufacturing

126	Cut and sew apparel contractors	0.01730317
117	Textile and fabric finishing mills	0.01467592
457	Advertising, public relations, and related services	0.01298164
465	Business support services	0.0116492

129 Other cut and sew apparel manufacturing

457	Advertising, public relations, and related services	0.01183661
437	Insurance carriers	0.00784089
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.0056079

130 Apparel accessories and other apparel manufacturing

457	Advertising, public relations, and related services	0.01233682
411	Truck transportation	0.00709276
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00691566
434	Nondepository credit intermediation and related activities	0.00663733
117	Textile and fabric finishing mills	0.006221

132 Footwear manufacturing

457	Advertising, public relations, and related services	0.0128242
411	Truck transportation	0.00672444
131	Leather and hide tanning and finishing	0.00659803

134 Sawmills

16	Commercial logging	0.18568946
10	All other crop farming	0.02423011
457	Advertising, public relations, and related services	0.00653458

141 Other millwork, including flooring

16	Commercial logging	0.04437877
----	--------------------	------------

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

457	Advertising, public relations, and related services	0.00716808
448	Accounting, tax preparation, bookkeeping, and payroll services	0.00666089

142 Wood container and pallet manufacturing

16	Commercial logging	0.01401014
117	Textile and fabric finishing mills	0.00969702
457	Advertising, public relations, and related services	0.00622181
448	Accounting, tax preparation, bookkeeping, and payroll services	0.00596014

143 Manufactured home (mobile home) manufacturing

no data for Ulster County

145 All other miscellaneous wood product manufacturing

16	Commercial logging	0.02659835
457	Advertising, public relations, and related services	0.01726094

149 Paperboard container manufacturing

147	Paper mills	0.03855133
148	Paperboard mills	0.01039051

153 All other converted paper product manufacturing

147	Paper mills	0.01494553
146	Pulp mills	0.00598573
457	Advertising, public relations, and related services	0.00598235
149	Paperboard container manufacturing	0.00559561
409	Rail transportation	0.00526126

164 Other basic inorganic chemical manufacturing

20	Extraction of natural gas and crude petroleum	0.01606429
50	Natural gas distribution	0.01377192
162	Industrial gas manufacturing	0.00855487
42	Electric power generation - Fossil fuel	0.00677851

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

409	Rail transportation	0.00502399
526	Other local government enterprises	0.00496673

174 Pharmaceutical preparation manufacturing

426	Cable and other subscription programming	0.0064397
418	Periodical publishers	0.00484225

184 Explosives manufacturing

169	Nitrogenous fertilizer manufacturing	0.02996443
50	Natural gas distribution	0.00827374
149	Paperboard container manufacturing	0.00697745
411	Truck transportation	0.00561389

193 Urethane and other foam product (except polystyrene) manufacturing

164	Other basic inorganic chemical manufacturing	0.01420533
162	Industrial gas manufacturing	0.00936656
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00744611
188	Plastics packaging materials and unlaminated film and sheet manufacturing	0.00569318

195 Other plastics product manufacturing

166	Plastics material and resin manufacturing	0.010291
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00991287
457	Advertising, public relations, and related services	0.00605407
149	Paperboard container manufacturing	0.00594591

198 Other rubber product manufacturing

249	Machine shops	0.00708548
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00688478
167	Synthetic rubber manufacturing	0.00581405
457	Advertising, public relations, and related services	0.00473815

164	Other basic inorganic chemical manufacturing	0.00419002
-----	--	------------

199 Pottery, ceramics, and plumbing fixture manufacturing

200	Brick, tile, and other structural clay product manufacturing	0.05801722
50	Natural gas distribution	0.01110079
234	Crown and closure manufacturing and metal stamping	0.01085343
437	Insurance carriers	0.00835908
434	Nondepository credit intermediation and related activities	0.00805836

206 Ready-mix concrete manufacturing

205	Cement manufacturing	0.05634642
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.01088725
50	Natural gas distribution	0.00777568

207 Concrete block and brick manufacturing

31	Sand and gravel mining	0.02795501
205	Cement manufacturing	0.02271537
457	Advertising, public relations, and related services	0.01439523
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00849583

209 Other concrete product manufacturing

460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.01749031
205	Cement manufacturing	0.01450227
411	Truck transportation	0.01037074

213 Cut stone and stone product manufacturing

214	Ground or treated mineral and earth manufacturing	0.01203094
457	Advertising, public relations, and related services	0.00964237

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00961418
31	Sand and gravel mining	0.0090679

224 Other aluminum rolling, drawing and extruding

221	Alumina refining and primary aluminum production	0.03109075
222	Secondary smelting and alloying of aluminum	0.02381471
249	Machine shops	0.00712447
223	Aluminum sheet, plate, and foil manufacturing	0.00569458
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00502517
50	Natural gas distribution	0.00479804
309	Semiconductor and related device manufacturing	0.00472156

234 Crown and closure manufacturing and metal stamping

217	Iron and steel mills and ferroalloy manufacturing	0.0134811
219	Rolled steel shape manufacturing	0.00928964
457	Advertising, public relations, and related services	0.00788139
435	Securities and commodity contracts intermediation and brokerage	0.00780369
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00704602
218	Iron, steel pipe and tube manufacturing from purchased steel	0.00634599

235 Cutlery, utensil, pot, and pan manufacturing

457	Advertising, public relations, and related services	0.0162035
435	Securities and commodity contracts intermediation and brokerage	0.01356539
149	Paperboard container manufacturing	0.01228507

237 Prefabricated metal buildings and components manufacturing

217	Iron and steel mills and ferroalloy manufacturing	0.02160424
219	Rolled steel shape manufacturing	0.01495707
218	Iron, steel pipe and tube manufacturing from purchased steel	0.01018837

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

435	Securities and commodity contracts intermediation and brokerage	0.00948034
465	Business support services	0.00744111
457	Advertising, public relations, and related services	0.00600187
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.0055056

238 Fabricated structural metal manufacturing

217	Iron and steel mills and ferroalloy manufacturing	0.01505491
219	Rolled steel shape manufacturing	0.01036837
465	Business support services	0.00976556
435	Securities and commodity contracts intermediation and brokerage	0.00967054
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00765111

239 Plate work manufacturing

217	Iron and steel mills and ferroalloy manufacturing	0.01532528
435	Securities and commodity contracts intermediation and brokerage	0.01093399
219	Rolled steel shape manufacturing	0.01075209
465	Business support services	0.00963467
249	Machine shops	0.00756529
218	Iron, steel pipe and tube manufacturing from purchased steel	0.00720639

240 Metal window and door manufacturing

249	Machine shops	0.01630311
435	Securities and commodity contracts intermediation and brokerage	0.01064368
217	Iron and steel mills and ferroalloy manufacturing	0.00746824
223	Aluminum sheet, plate, and foil manufacturing	0.00691957
457	Advertising, public relations, and related services	0.00608517
309	Semiconductor and related device manufacturing	0.00607994
187	Other miscellaneous chemical product manufacturing	0.00577763

241 Sheet metal work manufacturing

217	Iron and steel mills and ferroalloy manufacturing	0.01316064
435	Securities and commodity contracts intermediation and brokerage	0.01035011
219	Rolled steel shape manufacturing	0.00906439
249	Machine shops	0.00895091
309	Semiconductor and related device manufacturing	0.00789584
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00780047
218	Iron, steel pipe and tube manufacturing from purchased steel	0.00620587

242 Ornamental and architectural metal work manufacturing

217	Iron and steel mills and ferroalloy manufacturing	0.01511967
249	Machine shops	0.0138717
435	Securities and commodity contracts intermediation and brokerage	0.01219692
219	Rolled steel shape manufacturing	0.01041809
218	Iron, steel pipe and tube manufacturing from purchased steel	0.00713252
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00660368
309	Semiconductor and related device manufacturing	0.00644833

247 Hardware manufacturing

435	Securities and commodity contracts intermediation and brokerage	0.01513893
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00949256
457	Advertising, public relations, and related services	0.00941355

248 Spring and wire product manufacturing

220	Steel wire drawing	0.01902529
435	Securities and commodity contracts intermediation and brokerage	0.01177217

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00762089
309	Semiconductor and related device manufacturing	0.00748162
457	Advertising, public relations, and related services	0.00739497

249 Machine shops

435	Securities and commodity contracts intermediation and brokerage	0.01106356
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00940579
457	Advertising, public relations, and related services	0.0059395
449	Architectural, engineering, and related services	0.00584623
448	Accounting, tax preparation, bookkeeping, and payroll services	0.00558331

250 Turned product and screw, nut, and bolt manufacturing

435	Securities and commodity contracts intermediation and brokerage	0.01388237
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.008376
217	Iron and steel mills and ferroalloy manufacturing	0.00721418
229	Ferrous metal foundries	0.00680775
457	Advertising, public relations, and related services	0.00602335

252 Metal coating and nonprecious engraving

217	Iron and steel mills and ferroalloy manufacturing	0.01587341
177	Paint and coating manufacturing	0.01289283
219	Rolled steel shape manufacturing	0.01091215
435	Securities and commodity contracts intermediation and brokerage	0.00851882
50	Natural gas distribution	0.00763567
218	Iron, steel pipe and tube manufacturing from purchased steel	0.00746767
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00657195

261 Other fabricated metal manufacturing

435	Securities and commodity contracts intermediation and brokerage	0.00985276
217	Iron and steel mills and ferroalloy manufacturing	0.00903204
219	Rolled steel shape manufacturing	0.00625809
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00625376
457	Advertising, public relations, and related services	0.00563249
223	Aluminum sheet, plate, and foil manufacturing	0.00475859

264 Construction machinery manufacturing

217	Iron and steel mills and ferroalloy manufacturing	0.00700781
229	Ferrous metal foundries	0.00507782
435	Securities and commodity contracts intermediation and brokerage	0.00495144
219	Rolled steel shape manufacturing	0.00482653
457	Advertising, public relations, and related services	0.00444038
249	Machine shops	0.00424841

266 Oil and gas field machinery and equipment manufacturing

435	Securities and commodity contracts intermediation and brokerage	0.01272072
217	Iron and steel mills and ferroalloy manufacturing	0.00833336
216	Miscellaneous nonmetallic mineral products manufacturing	0.00832937
249	Machine shops	0.00798809
408	Air transportation	0.0078493
449	Architectural, engineering, and related services	0.00782443

268 Semiconductor machinery manufacturing

435	Securities and commodity contracts intermediation and brokerage	0.01688917
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00898786
448	Accounting, tax preparation, bookkeeping, and payroll services	0.00738225

411	Truck transportation	0.00728347
-----	----------------------	------------

271 All other industrial machinery manufacturing

435	Securities and commodity contracts intermediation and brokerage	0.01417553
249	Machine shops	0.00872374
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00723024
457	Advertising, public relations, and related services	0.00718847
288	Air and gas compressor manufacturing	0.00689518

275 Air purification and ventilation equipment manufacturing

226	Copper rolling, drawing, extruding and alloying	0.00913024
435	Securities and commodity contracts intermediation and brokerage	0.00666417
457	Advertising, public relations, and related services	0.00485623
115	Nonwoven fabric mills	0.00419237

277 Air conditioning, refrigeration, and warm air heating equipment manufacturing

435	Securities and commodity contracts intermediation and brokerage	0.00786704
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00501642
457	Advertising, public relations, and related services	0.00490364
226	Copper rolling, drawing, extruding and alloying	0.00472851

278 Industrial mold manufacturing

435	Securities and commodity contracts intermediation and brokerage	0.01158799
457	Advertising, public relations, and related services	0.00743948
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00650991
249	Machine shops	0.00618288

288 Air and gas compressor manufacturing

Ulster County Industry Targeting Study
 Technical Memorandum: Existing Conditions Analysis

229	Ferrous metal foundries	0.00898135
435	Securities and commodity contracts intermediation and brokerage	0.0080663
457	Advertising, public relations, and related services	0.00793284
309	Semiconductor and related device manufacturing	0.00652624
437	Insurance carriers	0.00650856

294 Power-driven handtool manufacturing

229	Ferrous metal foundries	0.00963043
230	Nonferrous metal foundries	0.00765727
188	Plastics packaging materials and unlaminated film and sheet manufacturing	0.006273
457	Advertising, public relations, and related services	0.00571715
217	Iron and steel mills and ferroalloy manufacturing	0.00556778
309	Semiconductor and related device manufacturing	0.00468225
149	Paperboard container manufacturing	0.0046219

300 Scales, balances, and miscellaneous general purpose machinery manufacturing

435	Securities and commodity contracts intermediation and brokerage	0.0114284
457	Advertising, public relations, and related services	0.00667196
460	Marketing research and all other miscellaneous professional, scientific, and technical services	0.00653467
167	Synthetic rubber manufacturing	0.00460798

307 Audio and video equipment manufacturing

457	Advertising, public relations, and related services	0.00894901
309	Semiconductor and related device manufacturing	0.00825558
437	Insurance carriers	0.00754479
312	Printed circuit assembly (electronic assembly) manufacturing	0.00632358
434	Nondepository credit intermediation and related activities	0.00619649

309 Semiconductor and related device manufacturing

Ulster County Industry Targeting Study
Technical Memorandum: Existing Conditions Analysis

162	Industrial gas manufacturing	0.01456718
457	Advertising, public relations, and related services	0.01006928
465	Business support services	0.00781401
164	Other basic inorganic chemical manufacturing	0.00699055

312 Printed circuit assembly (electronic assembly) manufacturing

457	Advertising, public relations, and related services	0.00546646
454	Management consulting services	0.00296553
437	Insurance carriers	0.002648

Source: Minnesota Implan Group, Type 1 Multipliers for Ulster County & NYS, 2015.