



# ECONOMIC DEVELOPMENT STRATEGIC ANALYSIS AND ACTION PLAN

*FOR FRANKLIN COUNTY, NY*

---

*DECEMBER 2018*

## **FOREWORD**

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# EXECUTIVE SUMMARY

A strong value proposition effectively communicates a region's distinctive benefits to its target audience which, in this case, comprises of existing business leaders looking to re-invest as well as potential new investors. A set of five important local clusters has previously been identified. Those clusters are:

- Agriculture and Food Processing
- Environmental Science and Biotechnology
- Forestry and Wood Products
- Health Care and Wellness
- Tourism, Culture and Recreation

In order to identify Franklin County's value proposition and action plan to reach its business retention and attraction goals, CAI Global performed a primary data analysis, reviewed the identified clusters, and performed an industry analysis.

The primary data analysis confirmed that Franklin County's public sector dominated its local economy. It also showed that the region's energy supply was a strong comparative advantage in that it is largely available and low-cost and shows tremendous potential to become a logistical hub thanks to its strategic location.

Through the review of the five clusters and industry analysis, ten complementary industries to attract to the region were identified. These industries are mainly tied to the existing Agriculture and Food Processing, Environmental Science and Biotechnology, and Forestry and Wood Products clusters. They were selected based on the fact that they are complementary to the existing clusters and they would find a market and workforce by locating in Franklin County. Therefore, attracting businesses from these industries will contribute to strengthening and growing the existing local clusters.

The industries to attract are:

- Timber Tract Operations

According to IBIS World, "the Timber Services industry manages tracts of timberland and sells standing timber to downstream wood, paper and pulp product manufacturing industries." The industry's main end-customer is the residential construction sector, therefore the recent growth in the US housing market has been beneficial to timber services. On the other hand, the markets of import-heavy wood product manufacturing and paper manufacturing have suffered from technological change. However, the negative effect of this on the timber services industry was offset by the thriving housing market.

- Soil Preparation, Planting, and Cultivating
- Postharvest Crop Activities (except Cotton Ginning)
- Farm Labor Contractors and Crew Leaders
- Farm Management Services



According to IBIS World, “the Crop Services industry consists of companies that assist in a variety of planting, harvesting and treatment activities for crop producers. The industry provides services for all types of crops, including handpicking fruit, crop dusting and cotton ginning.”

- Support Activities for Animal Production

According to IBIS World, “operators in the Livestock Production Support Services industry are primarily hired by livestock farms and ranches to perform support services such as boarding horses, administering vaccinations and testing milk products.” Similar to the crop services industry, the demand for the livestock production support services industry is influenced by the willingness of farms to outsource these types of services.

- Other Animal Food Manufacturing

According to IBIS World, “operators in this industry produce food for animals such as livestock and pets by processing raw ingredients. The products are then packaged and sold to cattle ranches, dairy farms, other animal production farms, grocery wholesalers and retailers.”

Demand for the animal food production industry is influenced by farming intensity or, in other words, the degree of industrialization of farming operations. Intensive farming operations involve a very specific diet and nutritionally modified foods for the animals to ensure a very specific production of milk and/or meat. However, there is a growing trend favoring low intensity farming, where animals feed off of pastures and organically grown foods.

- Fluid Milk Manufacturing
- Dry, Condensed, and Evaporated Dairy Product Manufacturing

According to IBIS World, “operators in this industry manufacture dairy products such as pasteurized milk, cream, butter, yogurt, cheese and dry, condensed and evaporated milk. Operators supply these goods to a variety of market segments such as retailers, wholesale and food services.”

The demand for dairy products is generally stable, therefore industry players have a certain flexibility when it comes to pricing. An increase in input prices is therefore good news for the industry as it typically will pass along the costs by charging higher prices.

- Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)

According to IBIS World, “this industry includes companies and organizations that are involved in physical, engineering or life sciences research and development (R&D). The industry only includes operators whose primary purpose is R&D and excludes players such as pharmaceutical or manufacturing companies that may undertake R&D to support their primary operations. Government entities are also excluded from this industry, though these entities may contract and fund the research this industry undertakes.”

In addition, based on CAI Global’s analysis of various factors, including the market, workforce, and local infrastructures, it was determined that Franklin County possesses the necessary attributes to welcome companies from the Tier 2-3 Aluminum Manufacturing and Healthcare and Life Sciences sectors.



Franklin’s value proposition includes:

- An available workforce that includes qualified veterans and correctional officers as well as former employees of large companies that recently closed such as Alcoa and Pfizer;
- Low-cost utilities, namely electricity that is among the least expensive in the country;
- High potential in terms of transportation logistics;
- Proximity to Canada.

Based on the industry analysis and value proposition, below is a step-by-step action plan for the next 5 to 6 years:

Recommendations	Actions
Create a communications plan for business attraction, based on the supporting supplier industries of Camoin-identified clusters	Attraction of the identified supporting suppliers to strengthen the current clusters <ul style="list-style-type: none"> <li>• Web based strategy (mainly the website)</li> <li>• One plan for each targeted industry</li> </ul>
Create a communications plan for the main occupations needed	<ul style="list-style-type: none"> <li>• Web based (mainly the website)</li> <li>• One for each occupation category</li> </ul>
Develop a promotional strategy for Canadian and Quebec based companies	<ul style="list-style-type: none"> <li>• Partnerships with relevant Canadian association and ministries</li> <li>• Webinar training on “how to do business in Franklin County” and on trade tariffs</li> <li>• Use foreign “Empire State Development representative” to support initiatives</li> <li>• Use existing partnership as a leverage for reaching out Canadian association (North Country Chamber of Commerce)</li> </ul>
Develop the infrastructure in the Chateaugay business park	<ul style="list-style-type: none"> <li>• Prepare subdivisions based on the recommended industries</li> </ul>
Develop an industrial synergy study for the Healthcare and Life Sciences local industry	Synergy study to find out which types of companies the local industry buys from specifically, as these suppliers will become interesting companies to attract to the region to strengthen the R&D and Biotechnology cluster.
Develop a prospecting plan for tier 3 Canadian aluminum businesses	<ul style="list-style-type: none"> <li>• Study of the main products in demand in the U.S.</li> <li>• List of Canadian businesses supplying U.S. firms</li> </ul>



# METHODOLOGY

The main objective of this report is to identify Franklin County’s value proposition in order to develop a concrete action plan intended to attract strategic investment into the region. To do so, CAI Global (CAI) followed the following steps:

## 1. Primary data analysis

CAI Global performed separate data analysis for labor, infrastructure, and utilities & energy. For the labor analysis, CAI used and analysed information extracted from JobsEQ®, a product of Chmura Economics & Analytics as the main source. As for the infrastructure analysis, the information is based primarily on CAI’s expertise as a site selector in investment project strategy and site selection acquired by working with clients from both the private and public sectors, and from a multitude of industries for over 30 years. Finally, the analyzed information in the utilities & energy section came from a variety of sources, namely the U.S. Energy Information Administration.

Appendix A lists the definitions of terms used in this report, including the location quotient and shift share analysis.

This primary data analysis allowed CAI to identify meaningful occupations in the region and industries for which these occupations are pertinent. Furthermore, future needs were determined in terms of these occupations as well as whether or not future needs can be fulfilled by local educational institutions. Finally, in terms of infrastructure, including utilities, CAI was able to compare what is available versus what is needed locally.

## 2. Review the existing industry analysis by Camoin

The Camoin Comprehensive Economic Development Study completed in 2015 identified five industries as relevant to the economy of Franklin County:

1. Agriculture and Food Processing
2. Environmental Science and Biotechnology
3. Forestry and Wood Products
4. Health Care and Wellness
5. Tourism, Culture and Recreation

CAI fact checked these assumptions and previously identified opportunities to ensure that they are current and meaningful using tools such as JobsEQ, interviews and roundtables.

Appendix B describes the interviews and roundtable process.

## 3. Perform an industry analysis

To identify which industries to develop locally, CAI analyzed the following factors, primarily using information extracted from JobsEQ:

- The economic value of the industry in Franklin County or, in other words, the amount of demand for that industry;
- The required workforce and whether that workforce is available and sustainable locally;



- The integration of the industry in the current supply chain or, in other words, whether it is complementary to the currently existing industries.

In terms of economic development attraction strategies, prioritizing the private sector over the public sector is a better way to implement short to medium-term strategies. As explained further in this report, the supply chain, human capital, and competition (supply chain) are the foundations to developing a cluster, whereas government, universities, and social capital are a cluster's contributing factors.

Once these three steps were completed, a value proposition and action plan was developed.



# TABLE OF CONTENTS

Executive Summary .....	i
Methodology .....	iv
Table of Contents .....	i
Introduction.....	1
Data Analysis.....	2
Introduction.....	3
Economic Overview .....	3
Labor Analysis.....	7
Industry Snapshot .....	7
Occupation Snapshot.....	13
Education Overview.....	22
Infrastructure Analysis.....	27
Statistics Analyzed for Infrastructures .....	27
Comparison with Neighboring Counties.....	29
Infrastructure Needs Specific to Certain Industries.....	30
Utilities and Energy Analysis .....	35
Energy Analysis .....	35
Roads and Railway Analysis.....	46
Optical Fiber and Net Deployment Analysis .....	51
Conclusion of the Primary Data Analysis.....	55
Industry Sectors Analysis.....	57
Introduction.....	58
Gross Domestic Product.....	60
Industries Identified by Camoin - Review .....	61
Complementary Industries to Develop.....	82
Complementary Industries to Attract Based on Workforce .....	82
Complementary Industries to Attract Based on Market.....	85
Complementary Industries to Attract – Final Selection.....	89
Other Industries to Attract.....	93
Value Proposition .....	97
Franklin County’s Value Proposition.....	98





Advantages of the Region .....	98
Challenges of the Region .....	99
The Proposed Value Proposition for the Region.....	99
Action Plan .....	104
Introduction.....	105
Communications Plan .....	106
Promotional plan for Canadian & Quebec based companies.....	109
Infrastructure .....	110
APPENDIX A: Definition of Terms Used in This Report.....	111
APPENDIX B: Description of Interviews and Roundtables .....	112
One-on-one Interviews.....	112
Roundtable Discussions .....	112
Other meetings.....	112
APPENDIX C: What-If Tables for Complementary Industries .....	114





# INTRODUCTION

Franklin County has a population of just over 51,000 people and is uniquely challenged by the size of the territory it covers. The County is home to three distinct main regions, Malone, Saranac Lake and Tupper Lake, all of which are located far apart from each other. Its overall unemployment level is a full 2 points over the state and national average with a seasonally adjusted monthly rate of 6.4% in December 2017 compared to the national rate of 4.3%. Its poverty rate stands at 19.2% compared to the state and national averages both at approximately 15%. The rate of disconnected youths (16 to 19-year-olds who are not in school, not high school graduates, and unemployed) is almost twice as high (5.4%) in Franklin County than in the state and nation as a whole (2.9% and 2.8% respectively). **Although these workforce statistics are problematic to Franklin County’s economic health, paired with the global workforce shortage, this could become a development opportunity for the region.**

Franklin County relies heavily on the public sector which employs over 50% of the working population. This report aims to identify opportunities and ways in which the County can move towards a more diversified economy and develop its private sector. The County has numerous assets that can help in working towards the development of industrial clusters such as the Trudeau Institute in Saranac Lake, one of the country’s lowest electrical rates in Tupper Lake, forest and wood expertise assets, and its growing tourism industry. Some regions that have successfully developed their industrial clusters are now faced with overcapacity issues where competition and workforce shortages are problematic. Franklin County is well positioned to attract businesses adverse to being in a competitive environment. Malone, for example, can be a great alternative to nearby cities like Plattsburgh for companies having difficulty recruiting.

The Mohawk community is an important part of Franklin County and, through the Mohawk Casino, is the largest private employer in all of North Country. Their involvement in Franklin County’s tourism and industrial development is key.



# DATA ANALYSIS

# INTRODUCTION

## Economic Overview

### Demographic Profile

The population in Franklin County, New York was 51,007 per the American Community Survey data for 2012-2016.

The region has a civilian labor force of 22,014 with a participation rate of 52.3%. Among individuals aged 25 to 64 in Franklin County, 17.4% have a bachelor's degree or higher which compares with 31.8% in the nation.

The median household income in Franklin County is \$49,782 and the median house value is \$100,900.

Summary <sup>1</sup>						
	Percent			Value		
	Franklin County, New York	New York	USA	Franklin County, New York	New York	USA
<b>Demographics</b>						
Population (ACS)	—	—	—	51,007	19,697,457	318,558,162
Male	54.5%	48.5%	49.2%	27,788	9,555,130	156,765,322
Female	45.5%	51.5%	50.8%	23,219	10,142,327	161,792,840
Median Age <sup>2</sup>	—	—	—	40.1	38.2	37.7
Under 18 Years	19.8%	21.5%	23.1%	10,099	4,226,409	73,612,438
18 to 24 Years	10.0%	10.0%	9.8%	5,112	1,966,965	31,296,577
25 to 34 Years	14.4%	14.4%	13.6%	7,335	2,831,379	43,397,907
35 to 44 Years	12.3%	12.7%	12.7%	6,267	2,501,802	40,548,400
45 to 54 Years	15.2%	14.1%	13.6%	7,761	2,780,247	43,460,466
55 to 64 Years	13.4%	12.7%	12.6%	6,818	2,496,854	40,061,742
65 to 74 Years	8.6%	8.1%	8.3%	4,366	1,600,042	26,355,308
75 Years, and Over	6.4%	6.6%	6.2%	3,249	1,293,759	19,825,324
Race: White	83.0%	64.3%	73.3%	42,319	12,667,413	233,657,078
Race: Black or African American	5.6%	15.6%	12.6%	2,869	3,073,278	40,241,818
Race: American Indian and Alaska Native	6.9%	0.4%	0.8%	3,543	75,751	2,597,817
Race: Asian	0.5%	8.1%	5.2%	232	1,599,216	16,614,625
Race: Native Hawaiian and Other Pacific Islander	0.2%	0.0%	0.2%	88	7,528	560,021
Race: Some Other Race	2.0%	8.6%	4.8%	1,031	1,697,831	15,133,856
Race: Two or More Races	1.8%	2.9%	3.1%	925	576,440	9,752,947
Hispanic or Latino (of any race)	3.3%	18.6%	17.3%	1,681	3,661,929	55,199,107
<b>Population Growth</b>						
Population (Pop Estimates) <sup>5</sup>	—	—	—	50,409	19,745,289	323,127,513
Population Annual Average Growth <sup>5</sup>	-0.2%	0.3%	0.8%	-110	64,066	2,474,760
<b>Economic</b>						
Labor Force Participation Rate and Size (civilian population 16 years and over)	52.3%	63.4%	63.3%	22,014	10,100,102	159,807,099
Armed Forces Labor Force	0.0%	0.1%	0.4%	9	22,976	1,011,641



Summary <sup>1</sup>						
	Percent			Value		
	Franklin County, New York	New York	USA	Franklin County, New York	New York	USA
Veterans, Age 18-64	5.8%	2.8%	5.1%	1,929	352,446	10,165,671
Median Household Income <sup>2</sup>	—	—	—	\$49,782	\$60,741	\$55,322
Per Capita Income	—	—	—	\$23,660	\$34,212	\$29,829
Poverty Level (of all people)	19.2%	15.5%	15.1%	8,706	2,967,564	46,932,225
Households Receiving Food Stamps	18.2%	15.4%	13.0%	3,510	1,118,434	15,360,951
Mean Commute Time (minutes)	—	—	—	20.8	32.6	26.1
Commute via Public Transportation	0.6%	28.0%	5.1%	118	2,564,874	7,476,312
Union Membership <sup>3</sup>	43.0%	23.5%	10.7%	—	—	—
<b>Educational Attainment, Age 25-64</b>						
No High School Diploma	13.3%	12.1%	11.6%	3,738	1,285,695	19,478,050
High School Graduate	35.7%	24.6%	26.1%	10,067	2,613,737	43,788,541
Some College, No Degree	20.4%	16.7%	21.5%	5,750	1,773,564	36,025,193
Associate's Degree	13.2%	9.5%	8.9%	3,722	1,004,657	14,962,488
Bachelor's Degree	8.8%	21.6%	20.2%	2,489	2,294,701	33,845,524
Postgraduate Degree	8.6%	15.4%	11.6%	2,415	1,637,928	19,368,719
<b>Housing</b>						
Total Housing Units	—	—	—	25,324	8,191,568	134,054,899
Median House Value (of owner-occupied units) <sup>2</sup>	—	—	—	\$100,900	\$286,300	\$184,700
Homeowner Vacancy	1.3%	1.7%	1.8%	187	68,170	1,395,797
Rental Vacancy	4.5%	4.3%	6.2%	256	152,914	2,855,844
Renter-Occupied Housing Units (% of Occupied Units)	27.7%	46.4%	36.4%	5,343	3,371,574	42,835,169
Occupied Housing Units with No Vehicle Available (% of Occupied Units)	10.2%	29.2%	9.0%	1,970	2,123,991	10,562,847
<b>Social</b>						
Enrolled in Grade 12 (% of total population)	1.1%	1.3%	1.4%	547	265,194	4,433,703
Disconnected Youth <sup>4</sup>	5.4%	2.9%	2.8%	136	30,030	485,589
Children in Single Parent Families (% of all children)	39.7%	35.4%	34.7%	3,800	1,428,780	24,318,038
With a Disability, Age 18-64	13.3%	8.7%	10.3%	3,819	1,082,491	20,188,257
With a Disability, Age 18-64, Labor Force Participation Rate and Size	27.2%	38.9%	41.0%	1,040	420,792	8,278,834
Foreign Born	4.0%	22.6%	13.2%	2,062	4,442,247	42,194,354
Speak English Less Than Very Well (population 5 yrs and over)	2.3%	13.5%	8.5%	1,110	2,494,711	25,440,956

Source: [JobsEQ@](mailto:JobsEQ@)

1. American Community Survey 2012-2016, unless noted otherwise

2. Median values for certain aggregate regions (such as MSAs) may be estimated as the weighted averages of the median values from the composing counties.

3. 2016; Current Population Survey, unionstats.com, and Chmura; county- and zip-level data are best estimates based upon industry-, MSA-, and state-level data

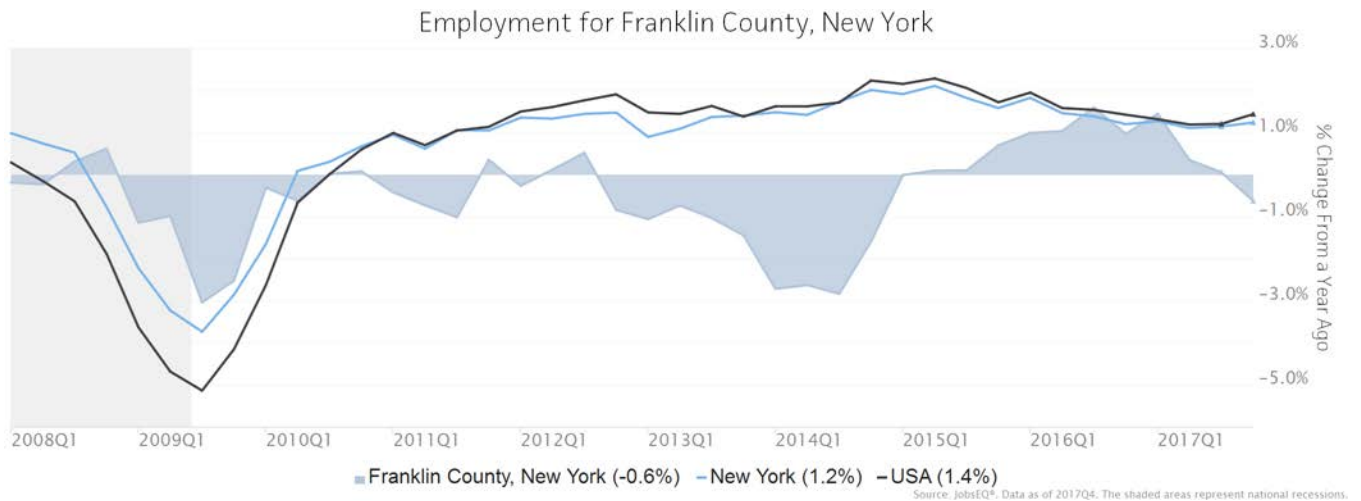
4. Disconnected Youth are 16-19 year olds who are (1) not in school, (2) not high school graduates, and (3) either unemployed or not in the labor force.

5. Census 2016, annual average growth rate since 2006



## Employment Trends

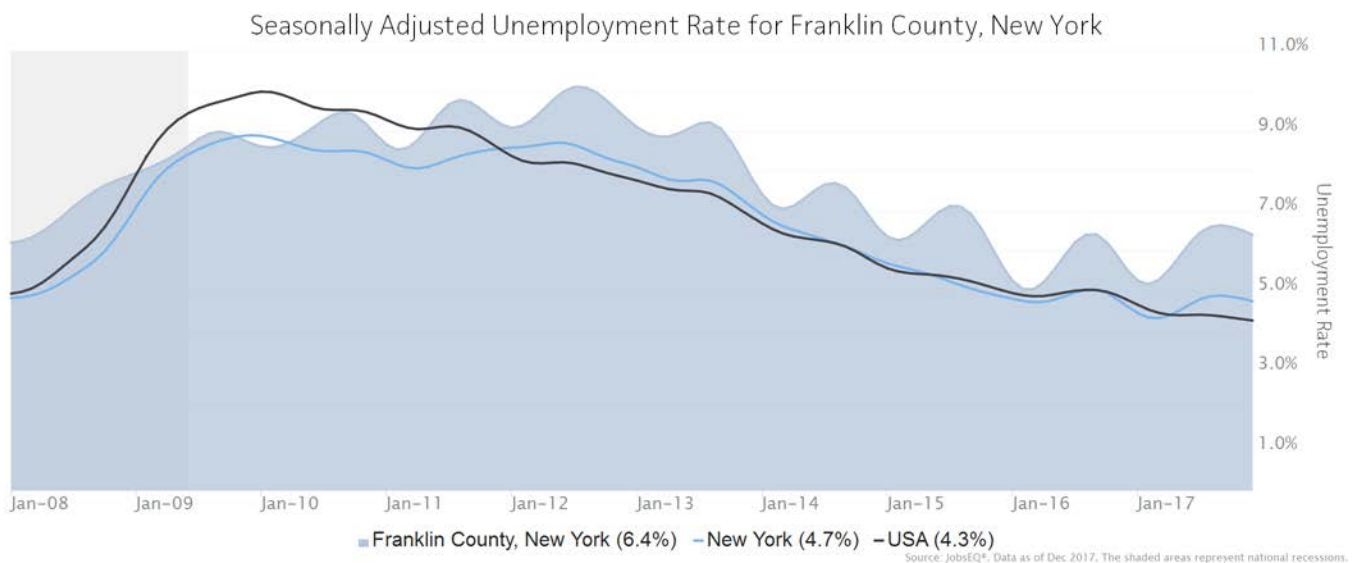
As of Q4 2017, total employment for Franklin County was 19,517 (based on a four-quarter moving average). Over the year ending Q4 2017, employment declined 0.6% in the region.



Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2017Q2 with preliminary estimates updated to 2017Q4.

## Unemployment Rate

The seasonally adjusted unemployment rate for Franklin County was 6.4% as of December 2017. The regional unemployment rate was higher than the national rate of 4.3%. One year earlier, in December 2016, the unemployment rate in Franklin County, New York was 5.5%.

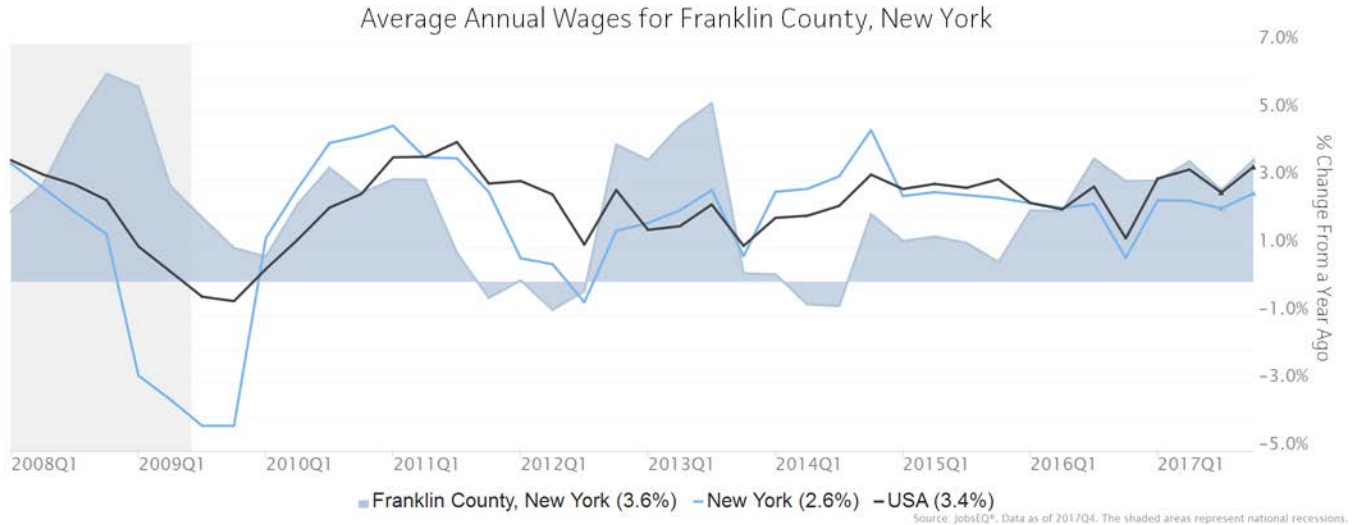


Unemployment rate data are from the Local Area Unemployment Statistics, provided by the Bureau of Labor Statistics and updated through December 2017.



## Wage Trends

The average worker in Franklin County earned annual wages of \$41,735 as of Q4 2017. Average annual wages per worker increased 3.6% in the region during the preceding four quarters. For comparison purposes, annual average wages were \$54,343 in the nation as of Q4 2017.



Annual average wages per worker data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2017Q2 with preliminary estimates updated to 2017Q4.

## Cost of Living Index

The Cost of Living Index estimates the relative price levels for consumer goods and services. When applied to wages and salaries, the result is a measure of relative purchasing power. The cost of living is 6.0% higher in Franklin County than the U.S. average.

### Cost of Living Information

	Annual Average Salary	Cost of Living Index (Base US)	US Purchasing Power
Franklin County, New York	\$41,735	106.0	\$39,385
New York	\$68,090	139.4	\$48,860
USA	\$54,343	100.0	\$54,343

Source: [jobsEQ@](mailto:jobsEQ@)  
 Data as of 2017Q4  
 Cost of Living per C2ER, data as of 2017q4, imputed by Chmura where necessary.





# LABOR ANALYSIS

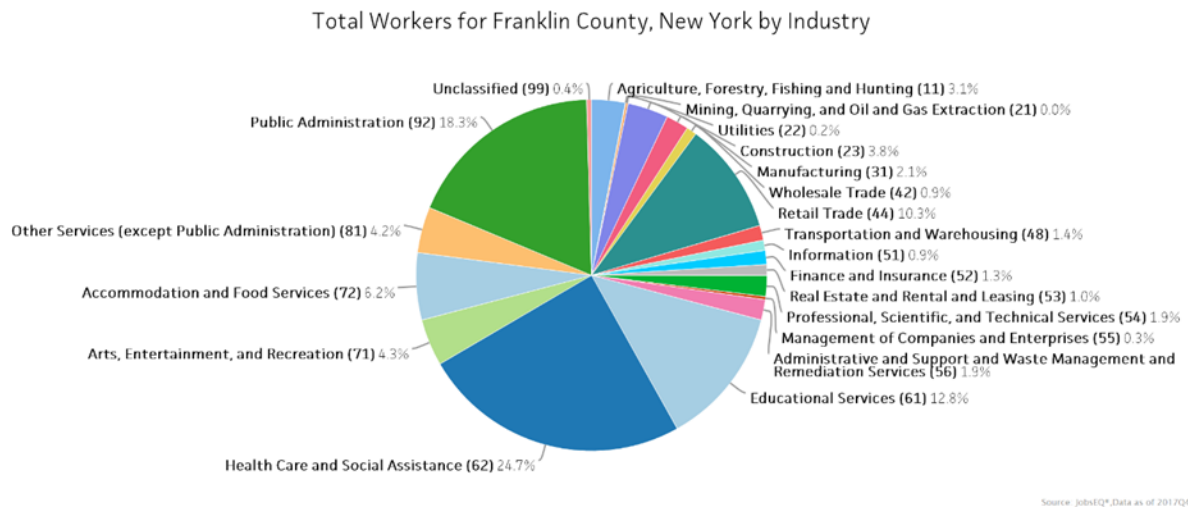
In order to determine which skill sets are meaningful for Franklin County’s economic growth, CAI first looked at the industries and occupations of importance in Franklin County.

Presented below is the full analysis.

## Industry Snapshot

Franklin County is known for the presence of its correctional facilities (Franklin Correctional Facility, Bare Hill Correctional Facility, Upstate Correctional Facility, and Franklin County Jail). Which are large employers for the region. In addition, the County is home to the largest private sector employer in all of North Country: the Akwesasne Mohawk Casino. It employs about 900 people from Franklin County and surrounding regions.

The image below presents the industries segmented by number of total workers:



Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2017Q2 with preliminary estimates updated to 2017Q4.

The figure above shows that Franklin County’s economy is heavily reliant on public sectors such as Health Care & Social Assistance and Public Administration. The largest sector in terms of employment in Franklin County is Health Care and Social Assistance, employing 4,820 workers (or 26.7%). The next-largest sectors in the region are Public Administration (3,567 workers) and Educational Services (2,493).

The figure below provides a complete portrait of all industries (2 levels of NAICS) including the Location Quotient and expected growth rate over the next 5 years. The highlighted sectors will be investigated further in the next section.



		Current			5-Year History		5-Year Forecast				
		Four Quarters Ending with 2017q4			Total Change	Avg Ann % Chg in Empl		Separations (Approximate)		---Growth---	
NAICS	Industry	Empl	Avg Ann Wages	LQ	Empl	Region	Total New Demand	Exits	Transfers	Empl	Avg Ann Rate
11	Agriculture, Forestry, Fishing and Hunting	605	\$29,688	2.20	43	1.5%	292	138	182	-27	-0.9%
21	Mining, Quarrying, and Oil and Gas Extraction	7	\$40,787	0.09	-21	-24.3%	3	1	2	-1	-1.8%
22	Utilities	44	\$120,424	0.42	-3	-1.3%	18	7	12	-1	-0.6%
23	Construction	732	\$35,795	0.67	49	1.4%	357	129	230	-2	0.0%
31	Manufacturing	407	\$41,047	0.25	-47	-2.2%	159	74	127	-43	-2.2%
42	Wholesale Trade	185	\$45,253	0.24	1	0.1%	87	36	59	-8	-0.8%
44	Retail Trade	2,008	\$27,905	0.96	-95	-0.9%	1,252	582	736	-66	-0.7%
48	Transportation and Warehousing	268	\$36,815	0.33	-53	-3.5%	123	59	79	-15	-1.1%
51	Information	184	\$38,734	0.48	-33	-3.2%	69	31	54	-16	-1.8%
52	Finance and Insurance	249	\$41,769	0.32	-41	-3.0%	105	44	71	-10	-0.8%
53	Real Estate and Rental and Leasing	196	\$32,787	0.59	-35	-3.2%	88	44	53	-9	-0.9%
54	Professional, Scientific, and Technical Services	374	\$54,824	0.29	-97	-4.5%	163	60	100	2	0.1%
55	Management of Companies and Enterprises	56	\$29,066	0.19	-14	-4.4%	24	9	16	-1	-0.4%
56	Administrative and Support and Waste Management and Remediation Services	367	\$43,235	0.29	44	2.6%	215	90	122	3	0.2%
61	Educational Services	2,493	\$40,741	1.55	92	0.8%	1,114	552	593	-31	-0.3%
62	Health Care and Social Assistance	4,820	\$47,839	1.73	-104	-0.4%	2,381	1,122	1,162	97	0.4%
71	Arts, Entertainment, and Recreation	844	\$28,777	2.19	-118	-2.6%	558	262	321	-25	-0.6%
72	Accommodation and Food Services	1,203	\$19,214	0.69	79	1.4%	945	427	538	-20	-0.3%
81	Other Services (except Public Administration)	824	\$24,785	0.95	-110	-2.5%	434	210	250	-27	-0.7%
92	Public Administration	3,567	\$56,341	3.87	20	0.1%	1,463	682	925	-144	-0.8%
99	Unclassified	84	\$21,383	2.04	75	55.8%	46	20	27	-1	-0.3%
	<b>Total - All Industries</b>	<b>19,517</b>	<b>\$41,735</b>	<b>1.00</b>	<b>-368</b>	<b>-0.4%</b>	<b>10,222</b>	<b>4,524</b>	<b>6,034</b>	<b>-336</b>	<b>-0.3%</b>

Source: [JobsEQ®](#)  
Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2017Q2 with preliminary estimates updated to 2017Q4. Forecast employment growth uses national projections adapted for regional growth patterns.

Sectors in Franklin County with the highest average wages per worker are Utilities (\$120,424), Public Administration (\$56,341), and Professional, Scientific, and Technical Services (\$54,824). Regional sectors with the best job growth over the last 5 years are Educational Services (+92 jobs), Accommodation and Food Services (+79), and Construction (+49).

Over the next 5 years, employment in Franklin County is projected to diminish by 336 jobs. The only sectors expected to grow in the region are: The Health Care and Social Assistance sector; the



Administrative and Support and Waste Management and Remediation Services sector; and the Professional, Scientific and Technical Services sector (with a +0.4%, +0.2% and +0.1% rate increase, year-over-year, respectively).

CAI highlighted 6 sectors in the table above that it considers significant to the economy of Franklin County. If an industry has a location quotient of 1.25 or greater, the region is considered to possess a competitive advantage in that sector. As such, out of the 6 sectors highlighted, 5 include those sectors with location quotients above 1.25. The sectors with significant LQs in the region are Public Administration (LQ = 3.87), Agriculture, Forestry, Fishing and Hunting (2.20), and Arts, Entertainment, and Recreation (2.19), Health Care and Social Assistance (1.73) and Educational Services (1.55). Except for Health Care and Social Assistance, all of those sectors are expected to decline over the next 5 years.

The 6<sup>th</sup> sector highlighted is Manufacturing. It has an alarmingly low LQ (0.25) and is expected to retract further in the future. Since manufacturing is an important part of an economic development plan, CAI included it in its analysis to give Franklin County the opportunity to identify and address any threats.

The figure below provides a more detailed portrait of the 6 previously highlighted industries broken down into 3-digit NAICS codes. CAI again highlighted in yellow the sectors which represent a competitive advantage for Franklin County. The selection criteria of having a location quotient of 1.25 or greater was maintained and, for the sake of this analysis, CAI added the criteria of current employment of 100 or greater. In the case of the manufacturing industry, CAI highlighted in blue the sectors that show the greatest importance in terms of employment within their category.

NAICS	Industry	Current			5-Year History		5-Year Forecast				
		Four Quarters Ending with 2017q4			Total Change	Avg Ann % Chg in Empl	Total New Demand	Separations (Approximate)		Growth	
		Empl	Avg Ann Wages	LQ	Empl	Region		Exits	Transfers	Empl	Avg Ann Rate
111	Crop Production	10	\$30,659	0.10	-16	-17.4%	5	2	3	0	-0.6%
112	Animal Production and Aquaculture	492	\$25,717	4.95	73	3.3%	204	128	92	-16	-0.7%
113	Forestry and Logging	81	\$48,057	8.08	1	0.4%	35	15	31	-11	-2.8%
114	Fishing, Hunting and Trapping	4	\$28,186	0.65	0	-1.0%	2	1	1	0	-0.2%
115	Support Activities for Agriculture and Forestry	17	\$45,068	0.31	-16	-12.5%	11	3	8	0	-0.2%
311	Food Manufacturing	127	\$34,424	0.62	25	4.5%	69	29	45	-6	-0.9%
312	Beverage and Tobacco Product Manufacturing	105	\$35,686	3.15	-16	-2.8%	25	20	33	-28	-6.0%
314	Textile Product Mills	3	\$3,691	0.21	1	4.1%	2	1	1	0	-0.2%
315	Apparel Manufacturing	2	\$5,058	0.13	0	2.9%	1	1	1	0	-0.2%
316	Leather and Allied Product Manufacturing	0	n/a	0.00	0	n/a	0	0	0	0	-0.2%



321	Wood Product Manufacturing	36	\$34,867	0.69	1	0.3%	18	7	12	-2	-1.0%
323	Printing and Related Support Activities	10	\$20,393	0.17	-2	-3.7%	4	2	3	-1	-2.5%
324	Petroleum and Coal Products Manufacturing	20	\$48,325	1.39	-14	-10.2%	8	3	6	-1	-1.4%
325	Chemical Manufacturing	4	\$33,064	0.04	3	33.8%	2	1	1	0	-1.2%
326	Plastics and Rubber Products Manufacturing	24	\$42,413	0.27	-35	-16.2%	10	4	8	-2	-1.9%
327	Non-metallic Mineral Product Manufacturing	10	\$37,628	0.19	-5	-8.1%	5	2	3	-1	-1.3%
332	Fabricated Metal Product Manufacturing	13	\$32,846	0.07	-14	-13.3%	6	2	4	-1	-0.8%
333	Machinery Manufacturing	1	\$21,300	0.01	0	-4.0%	1	0	0	0	-0.2%
334	Computer and Electronic Product Manufacturing	1	\$18,148	0.00	0	-5.1%	0	0	0	0	-0.2%
335	Electrical Equipment, Appliance, and Component Manufacturing	0	n/a	0.00	0	n/a	0	0	0	0	-0.2%
336	Transportation Equipment Manufacturing	1	\$27,213	0.00	0	-2.7%	0	0	0	0	-0.2%
337	Furniture and Related Product Manufacturing	34	\$32,148	0.66	8	5.6%	16	7	10	-2	-1.2%
339	Miscellaneous Manufacturing	13	\$28,386	0.16	2	3.6%	6	2	4	-1	-1.1%
611	Educational Services	2,493	\$40,740	1.55	92	0.8%	1,114	552	593	-31	-0.3%
621	Ambulatory Health Care Services	835	\$64,075	0.84	87	2.2%	448	179	194	75	1.7%
622	Hospitals	1,579	\$43,609	1.96	489	7.7%	562	292	310	-40	-0.5%
623	Nursing and Residential Care Facilities	1,685	\$42,174	3.77	-621	-6.1%	981	475	471	35	0.4%
624	Social Assistance	721	\$24,166	1.32	-59	-1.6%	459	220	216	23	0.6%
711	Performing Arts, Spectator Sports, and Related Industries	44	\$17,815	0.41	-1	-0.3%	25	12	14	0	-0.1%
712	Museums, Historical Sites, and Similar Institutions	60	\$29,855	1.89	12	4.5%	40	17	21	2	0.6%
713	Amusement, Gambling, and Recreation Industries	740	\$28,987	2.99	-129	-3.2%	529	247	309	-27	-0.7%
921	Executive, Legislative, and Other General Government Support	1,616	\$38,632	4.21	33	0.4%	713	329	429	-45	-0.6%
922	Justice, Public Order, and Safety Activities	1,706	\$73,004	7.17	-109	-1.2%	670	323	435	-88	-1.1%
923	Administration of Human Resource Programs	62	\$63,160	0.62	42	24.9%	24	11	16	-3	-1.1%



924	Administration of Environmental Quality Programs	71	\$51,948	1.74	-3	-0.7%	28	13	18	-3	-0.8%
925	Administration of Housing Programs, Urban Planning, and Community Development	28	\$35,093	2.42	22	35.3%	12	6	7	-1	-0.6%
926	Administration of Economic Programs	77	\$56,255	1.04	28	9.4%	29	14	19	-4	-1.0%
928	National Security and International Affairs	7	\$49,915	0.10	7	n/a	3	1	2	0	-1.1%
	Franklin County - important industries	12,736	\$46,488	1.68	-114	-0.2%	0	0	0	-167	-0.3%
	Total - All Industries	19,517	\$41,735	1.00	-368	-0.4%	10,222	4,524	6,034	-336	-0.3%

Source: [jobsEQ@](#)

Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2017Q2 with preliminary estimates updated to 2017Q4. Forecast employment growth uses national projections adapted for regional growth patterns.

Breaking down the highlighted 2-digit sectors into 3-digit sectors provides a better idea of which sectors in particular are performing well. For example, Agriculture, Forestry, Fishing and Hunting (NAICS code 11) was highlighted in the first table, but compared to the 3-digit table, **it is clear that Franklin County does not sustain a competitive advantage in Crop Production or in Fishing, Hunting and Trapping, but it does in Animal Production and Aquaculture and Forestry and Logging, the latter showing the highest LQ.**

The 3-digit sectors that stand out the most in terms of Location Quotient are Forestry and Logging (LQ = 8.08) and Justice, Public Order, and Safety Activity (LQ = 7.17). These two sectors also happen to have the highest average wages per worker within the highlighted 3-digit sectors.

Regional 3-digit sectors with the best job growth over the last 5 years are Hospitals (+489 jobs), Educational Services (+92), and Ambulatory Health Care Services (+87).

**The 3-digit sectors expected to grow in the region are: the Ambulatory Health Care Services sector; the Museums, Historical Sites, and Similar Institutions sector; the Social Assistance sector; and the Nursing and Residential Care Facilities sector** (with a +1.7%, +0.6%, +0.6% and +0.4% rate increase, year-over-year, respectively).

A shift-share analysis is useful to explore the data further since, like the location quotient, it highlights the uniqueness of a regional economy, but does so in terms of job growth rather than total jobs in an industry. The following table illustrates the shift-share analysis of the highlighted 3-digit sectors:

NAICS	Industry Title	Actual Growth Past 5 Years	National Growth	National Growth %	Industry Share Mix	Industry Share Mix %	Local Competitiveness	Local Competitiveness %
112	Animal Production and Aquaculture	73	36	43%	-5	6%	43	51%
311	Food Manufacturing	25	9	35%	5	18%	12	48%
312	Beverage and Tobacco Product Manufacturing	-16	10	28%	-21	57%	-5	15%
611	Educational Services	92	205	57%	-134	37%	21	6%
622	Hospitals	489	93	17%	-22	4%	418	78%
623	Nursing and Residential Care Facilities	-621	197	19%	-129	13%	-689	68%
624	Social Assistance	-59	67	10%	237	36%	-363	54%



<b>713</b>	<b>Amusement, Gambling, and Recreation Industries</b>	-129	74	27%	-140	50%	-64	23%
<b>921</b>	<b>Executive, Legislative, and Other General Government Support</b>	33	135	49%	-122	44%	19	7%
<b>922</b>	<b>Justice, Public Order, and Safety Activities</b>	-109	155	37%	-193	46%	-72	17%

Source: [JobsEQ®](#)

Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2017Q2 with preliminary estimates updated to 2017Q4. Forecast employment growth uses national projections adapted for regional growth patterns.

The figure above shows the shift share numbers for the previously highlighted 3-digit sectors for the past 5 years (2012 to 2017). CAI concentrated on the subsectors for which the percentage of employment growth or decrease attributable to Local Competitiveness represented the majority out of the three components, the other two being National Growth and Industry Share.

**The industries for which Local Competitiveness is the main factor responsible for employment growth are Hospitals (particularly General Medical and Surgical Hospitals) at 78%, Animal Production and Aquaculture at 51%, and Food Manufacturing (particularly Dairy Product Manufacturing) at 48%.** The industries for which there is actually a job decrease that is mainly attributable to Local Competitiveness are Nursing and Residential Care Facilities (particularly Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities) at 68% and Social Assistance (particularly Vocational Rehabilitation Services) at 54%. However, it is important to note that this statistic may be affected by the closing of the county nursing home and the opening of the hospital network nursing home in 2014. Employees who were classified as public and nursing care may have been reclassified as hospital employees when Alice Hyde Medical Center took many of these employees for their new nursing home.

Ironically, those industries that experienced employment growth in the past 5 years are expected to experience an employment decrease in the future, and vice-versa.

It is also interesting to note that the Amusement, Gambling, and Recreation Industries (particularly Gambling Industries) and Justice, Public Order, and Safety Activities sectors experienced some of the greatest job losses in the past 5 years although the 111 people that were affected by the closure of the Chateaugay prison in 2014 were supposed to be absorbed into other local or regional prisons.

## Industry Snapshot Conclusion

Through the Industry Analysis, **CAI found that Franklin County’s performing industries in terms of Location Quotient and Employment (number of workers in the industry in the region) are:**

- Animal Production and Aquaculture (SOC 112)
- Educational Services (SOC 611)
- Hospitals (SOC 622)
- Nursing and Residential Care Facilities (SOC 623)
- Social Assistance (SOC 624)
- Amusement, Gambling, and Recreation Industries (SOC 713)
- Executive, Legislative, and Other General Government Support (SOC 921)
- Justice, Public Order, and Safety Activities (SOC 922)
- Food Manufacturing (SOC 311)
- Beverage and Tobacco Product Manufacturing (SOC 312)



The Food Manufacturing industry was selected based on different criteria than the others. Although it has a low LQ, it was selected for its relatively high employment number and because it is a part of the Manufacturing industry group which is an important part of an economic development plan.

The result of the industry analysis confirms that Franklin County's business environment is very public sector oriented.

## Occupation Snapshot

The figure below provides a complete portrait of all the major occupation groups including the Location Quotient and expected growth rate over the next 5 years.

Occupation Snapshot in Franklin County, New York, 2017q4														
		Current						5-Year History		5-Year Forecast				
		Four Quarters Ending with 2017q4			-----2017q4-----			Total Change	Avg Ann % Chg in Empl	Total New Demand	--Separations--		---Growth---	
SOC	Occupation	Empl	Avg Ann Wages <sup>1</sup>	LQ	Unempl	Unempl Rate	Online Job Ads <sup>2</sup>				Empl	Region	Exits	Transfer
11-0000	Management	1,197	\$86,000	1.02	21	1.7%	46	20	0.3%	438	207	241	-10	-0.2%
13-0000	Business and Financial Operations	558	\$59,500	0.55	24	4.2%	18	-47	-1.6%	236	83	156	-3	-0.1%
15-0000	Computer and Mathematical	193	\$60,500	0.34	9	4.5%	12	10	1.1%	64	17	46	1	0.1%
17-0000	Architecture and Engineering	117	\$65,700	0.35	6	4.2%	3	-9	-1.5%	42	15	28	-1	-0.2%
19-0000	Life, Physical, and Social Science	165	\$60,400	1.04	5	3.2%	4	-6	-0.7%	72	21	50	1	0.1%
21-0000	Community and Social Service	862	\$44,300	2.75	27	3.3%	47	98	2.4%	489	172	292	25	0.6%
23-0000	Legal	144	\$87,400	0.90	4	3.2%	2	2	0.2%	38	16	22	-1	-0.1%
25-0000	Education, Training, and Library	1,605	\$51,100	1.46	38	2.4%	18	50	0.6%	662	342	327	-7	-0.1%
27-0000	Arts, Design, Entertainment, Sports, and Media	242	\$45,000	0.69	10	4.1%	9	-17	-1.4%	111	51	66	-5	-0.4%
29-0000	Healthcare Practitioners and Technical	1,458	\$71,400	1.31	38	2.7%	50	231	3.5%	406	196	192	18	0.2%
31-0000	Healthcare Support	802	\$29,300	1.46	60	6.9%	19	-104	-2.4%	483	241	218	24	0.6%
33-0000	Protective Service	1,633	\$57,500	3.90	86	5.4%	8	-61	-0.7%	594	316	369	-91	-1.1%
35-0000	Food Preparation and Serving Related	1,449	\$23,700	0.86	162	9.3%	42	76	1.1%	1,164	513	675	-25	-0.3%
37-0000	Building and Grounds Cleaning and Maintenance	784	\$28,000	1.14	69	7.7%	20	14	0.4%	466	236	243	-13	-0.3%
39-0000	Personal Care and Service	1,547	\$27,000	2.03	98	6.2%	33	-472	-5.2%	1,135	576	538	20	0.3%
41-0000	Sales and Related	1,442	\$30,500	0.72	105	6.3%	101	-85	-1.1%	979	466	556	-43	-0.6%



Occupation Snapshot in Franklin County, New York, 2017q4														
		Current						5-Year History		5-Year Forecast				
		Four Quarters Ending with 2017q4			----2017q4----			Total Change	Avg Ann % Chg in Empl	--Separations--			---Growth---	
SOC	Occupation	Empl	Avg Ann Wages <sup>1</sup>	LQ	Unempl	Unempl Rate	Online Job Ads <sup>2</sup>	Empl	Region	Total New Demand	Exits	Transfer	Empl	Avg Ann Rate
43-0000	Office and Administrative Support	2,415	\$34,500	0.84	154	5.8%	68	-9	-0.1%	1,131	603	660	-132	-1.1%
45-0000	Farming, Fishing, and Forestry	209	\$30,800	1.62	19	8.2%	6	25	2.5%	123	35	104	-16	-1.6%
47-0000	Construction and Extraction	851	\$45,700	0.96	82	8.3%	10	32	0.8%	414	154	266	-5	-0.1%
49-0000	Installation, Maintenance, and Repair	621	\$42,400	0.83	36	5.0%	28	-34	-1.1%	269	108	178	-16	-0.5%
51-0000	Production	448	\$36,200	0.38	35	5.5%	8	-36	-1.5%	199	89	144	-34	-1.6%
53-0000	Transportation and Material Moving	775	\$33,600	0.59	77	8.1%	34	-44	-1.1%	421	204	246	-30	-0.8%
	<b>Total - All Occupations</b>	<b>19,517</b>	<b>\$44,000</b>	<b>1.00</b>	<b>n/a</b>	<b>n/a</b>	<b>586</b>	<b>-368</b>	<b>-0.4%</b>	<b>9,944</b>	<b>4,663</b>	<b>5,617</b>	<b>-336</b>	<b>-0.3%</b>

Source: [JobsEQ®](#)

Data as of 2017Q4 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Occupation wages are as of 2016 and should be taken as the average for all Covered Employment

2. Data represent found online ads active within the last thirty days in any zip code intersecting or within the selected region; data represents a sampling rather than the complete universe of postings.

Occupation employment data are estimated via industry employment data and the estimated industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2017Q2, imputed where necessary with preliminary estimates updated to 2017Q4. Wages by occupation are as of 2016 provided by the BLS and imputed where necessary. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

The largest major occupation group in Franklin County is Office and Administrative Support Occupations, employing 2,415 workers. The next-largest occupation groups in the region are Protective Service Occupations (1,633 workers) and Education, Training, and Library Occupations (1,605 workers). Occupation groups in Franklin County with the highest average wages per worker are Legal Occupations (\$87,400), Management Occupations (\$86,000), and Healthcare Practitioners and Technical Occupations (\$71,400). The unemployment rate in the region varied in the major groups from 1.7% among Management Occupations to 9.3% among Food Preparation and Serving Related Occupations.

**Over the next 5 years, the fastest growing occupation group in Franklin County is expected to be Community and Social Service Occupations with a +0.6% year-over-year rate of growth.** The strongest expected growth forecast by number of jobs over this period is for Community and Social Service Occupations (+25) and Healthcare Support Occupations (+24). Over the same period, the highest separation demand (occupation demand due to retirements and workers moving from one occupation to another) is expected to affect Office and Administrative Support Occupations (1,263 jobs) and Food Preparation and Serving Related Occupations (1,188 jobs).

CAI highlighted 8 occupations in the table above that it considers significant to the economy of Franklin County. If an occupation has a location quotient of 1.25 or greater, the region is considered to possess a competitive advantage for that occupation. As such, out of the 8





occupations highlighted, 7 include those occupations with location quotients above 1.25. The occupations with significant LQs in the region are Protective Service (LQ = 3.90), Community and Social Service (2.75), Personal Care and Service (2.03), Farming, Fishing, and Forestry (1.62), Education, Training, and Library (1.46), Healthcare Support (1.46), and Healthcare Practitioners and Technical (1.31).

The 8<sup>th</sup> occupation highlighted is the Production occupational group. Not unlike the manufacturing sector, the production occupations have a low LQ of 0.38 and are expected to retract further overall in the future. Since production workers are crucial to the Manufacturing sector, which itself is an important part of an economic development plan, CAI included it in its analysis to give Franklin County the opportunity to identify any potential opportunities and address any threats for the sector and occupations.

For each one of the 3-digit industries that CAI highlighted as being important to Franklin County's economy because of the competitive advantage they represent for the region, the set of occupations which comprise their distinct workforces was analysed. For each industry, the top ten 3-digit occupations with a minimum employment number of 10 were selected. One of the objectives of this exercise is to **start identifying transferable skills** among the group of important industries for the region.

SOC	Occupation Title	Current Empl	Current LQ	Total 5-year demand
<b>Industry 112: Animal Production and Aquaculture in Franklin County, NY</b>				
11-9000	Other Management Occupations	326	1.44	111
45-2000	Agricultural Workers	125	1.27	80
<b>Industry 311: Food Manufacturing in Franklin County, NY</b>				
51-9000	Other Production Occupations	33	0.40	17
51-3000	Food Processing Workers	24	0.65	15
53-7000	Material Moving Workers	14	0.46	8
<b>Industry 312: Beverage and Tobacco Product Manufacturing in Franklin County, NY</b>				
51-9000	Other Production Occupations	38	0.40	6
51-3000	Food Processing Workers	12	0.65	2
49-9000	Other Installation, Maintenance, and Repair Occupations	10	0.90	1
53-7000	Material Moving Workers	10	0.46	2
<b>Industry 611: Educational Services in Franklin County, NY</b>				
25-2000	Preschool, Primary, Secondary, and Special Education School Teachers	697	1.45	231
25-9000	Other Education, Training, and Library Occupations	262	1.61	125
25-1000	Postsecondary Teachers	260	1.38	109
25-3000	Other Teachers and Instructors	185	1.28	95
37-2000	Building Cleaning and Pest Control Workers	129	1.2	80
43-6000	Secretaries and Administrative Assistants	115	0.95	48
11-9000	Other Management Occupations	85	1.44	32
43-9000	Other Office and Administrative Support Workers	78	0.91	36
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	64	3.13	34
53-3000	Motor Vehicle Operators	54	0.75	27
<b>Industry 622: Hospitals in Franklin County, NY</b>				
29-1000	Health Diagnosing and Treating Practitioners	609	1.36	148
29-2000	Health Technologists and Technicians	228	1.25	58



31-1000	Nursing, Psychiatric, and Home Health Aides	139	1.92	68
43-4000	Information and Record Clerks	64	0.75	34
37-2000	Building Cleaning and Pest Control Workers	60	1.2	36
31-9000	Other Healthcare Support Occupations	56	0.81	30
43-6000	Secretaries and Administrative Assistants	44	0.95	18
11-9000	Other Management Occupations	39	1.44	13
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	38	3.13	17
43-9000	Other Office and Administrative Support Workers	30	0.91	13
<b>Industry 623: Nursing and Residential Care Facilities in Franklin County, NY</b>				
39-9000	Other Personal Care and Service Workers	695	2.45	514
31-1000	Nursing, Psychiatric, and Home Health Aides	353	1.92	208
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	240	3.13	136
39-1000	Supervisors of Personal Care and Service Workers	55	3	27
29-2000	Health Technologists and Technicians	52	1.25	20
29-1000	Health Diagnosing and Treating Practitioners	36	1.36	10
11-9000	Other Management Occupations	31	1.44	13
37-2000	Building Cleaning and Pest Control Workers	21	1.2	14
43-6000	Secretaries and Administrative Assistants	21	0.95	9
11-1000	Top Executives	16	0.96	7
<b>Industry 624: Social Assistance in Franklin County, NY</b>				
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	188	3.13	120
39-9000	Other Personal Care and Service Workers	185	2.45	139
37-2000	Building Cleaning and Pest Control Workers	26	1.2	15
11-9000	Other Management Occupations	26	1.44	13
25-2000	Preschool, Primary, Secondary, and Special Education School Teachers	19	1.45	10
43-9000	Other Office and Administrative Support Workers	19	0.91	11
43-6000	Secretaries and Administrative Assistants	18	0.95	9
31-1000	Nursing, Psychiatric, and Home Health Aides	18	1.92	12
13-1000	Business Operations Specialists	18	0.55	8
25-9000	Other Education, Training, and Library Occupations	16	1.61	10
<b>Industry 713: Amusement, Gambling, and Recreation Industries in Franklin County, NY</b>				
39-3000	Entertainment Attendants and Related Workers	153	2.36	115
35-3000	Food and Beverage Serving Workers	81	0.84	67
41-2000	Retail Sales Workers	61	0.89	50
37-2000	Building Cleaning and Pest Control Workers	55	1.2	32
33-9000	Other Protective Service Workers	47	1.03	29
35-2000	Cooks and Food Preparation Workers	38	0.91	26
39-1000	Supervisors of Personal Care and Service Workers	34	3	23
43-3000	Financial Clerks	33	0.9	20
35-9000	Other Food Preparation and Serving Related Workers	31	0.94	25
49-9000	Other Installation, Maintenance, and Repair Occupations	31	0.9	13
<b>Industry 921: Executive, Legislative, and Other General Government Support in Franklin County, NY</b>				
33-3000	Law Enforcement Workers	263	8.36	79
47-4000	Other Construction and Related Workers	133	3.98	64
11-1000	Top Executives	94	0.96	31
43-4000	Information and Record Clerks	85	0.75	42
43-9000	Other Office and Administrative Support Workers	74	0.91	30



21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	71	3.13	35
49-9000	Other Installation, Maintenance, and Repair Occupations	49	0.9	22
43-6000	Secretaries and Administrative Assistants	46	0.95	18
33-2000	Fire Fighting and Prevention Workers	44	1.24	14
47-2000	Construction Trades Workers	41	0.8	21
<b>Industry 922: Justice, Public Order, and Safety Activities in Franklin County, NY</b>				
33-3000	Law Enforcement Workers	926	8.36	280
33-1000	Supervisors of Protective Service Workers	100	4.6	24
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	79	3.13	37
13-1000	Business Operations Specialists	63	0.55	24
47-4000	Other Construction and Related Workers	51	3.98	25
43-9000	Other Office and Administrative Support Workers	44	0.91	17
43-4000	Information and Record Clerks	42	0.75	18
23-1000	Lawyers, Judges, and Related Workers	34	1.03	7
43-6000	Secretaries and Administrative Assistants	31	0.95	12
13-2000	Financial Specialists	26	0.56	10

Source: [JobsEQ®](#)

Data as of 2017Q4 unless noted otherwise

Note: Figures may not sum due to rounding.

In order to start identifying the transferable skills within the group of important industries for the region, CAI identified the occupations that are in the top 10s in terms of employment, of at least three out of the ten industries. These occupations are listed below with the current employment in the industry, the location quotient, and the total 5-year demand in the industry.

Industry	Current Empl in Industry	Current LQ	Total 5-year demand in Industry
<b>Occupation 21-1000: Counselors, Social Workers, and Other Community and Social Service Specialists</b>			
Educational Services in Franklin County, NY (611)	64	3.13	34
Hospitals in Franklin County, NY (622)	38		17
Nursing and Residential Care Facilities in Franklin County, NY (623)	240		136
Social Assistance in Franklin County, NY (624)	188		120
Executive, Legislative, and Other General Government Support in Franklin County, NY (921)	71		35
Justice, Public Order, and Safety Activities in Franklin County, NY (922)	79		37
<b>Occupation 43-6000: Secretaries and Administrative Assistants</b>			
Educational Services in Franklin County, NY (611)	115	0.95	48
Hospitals in Franklin County, NY (622)	44		18
Nursing and Residential Care Facilities in Franklin County, NY (623)	21		9
Social Assistance in Franklin County, NY (624)	18		9
Executive, Legislative, and Other General Government Support in Franklin County, NY (921)	46		18
Justice, Public Order, and Safety Activities in Franklin County, NY (922)	31		12
<b>Occupation 11-9000: Other Management Occupations</b>			
Animal Production and Aquaculture in Franklin County, NY (112)	326	1.44	111
Educational Services in Franklin County, NY (611)	85		32
Hospitals in Franklin County, NY (622)	39		13
Nursing and Residential Care Facilities in Franklin County, NY (623)	31		13



Social Assistance in Franklin County, NY (624)	26		13
<b>Occupation 43-9000: Other Office and Administrative Support Workers</b>			
Educational Services in Franklin County, NY (611)	78	0.91	36
Hospitals in Franklin County, NY (622)	30		13
Social Assistance in Franklin County, NY (624)	19		11
Executive, Legislative, and Other General Government Support in Franklin County, NY (921)	74		30
Justice, Public Order, and Safety Activities in Franklin County, NY (922)	44		17
<b>Occupation 31-1000: Nursing, Psychiatric, and Home Health Aides</b>			
Hospitals in Franklin County, NY (622)	139	1.92	68
Nursing and Residential Care Facilities in Franklin County, NY (623)	353		208
Social Assistance in Franklin County, NY (624)	18		12
<b>Occupation 43-4000: Information and Record Clerks</b>			
Hospitals in Franklin County, NY (622)	64	0.75	34
Executive, Legislative, and Other General Government Support in Franklin County, NY (921)	85		42
Justice, Public Order, and Safety Activities in Franklin County, NY (922)	42		18
<b>Occupation 49-9000: Other Installation, Maintenance, and Repair Occupations</b>			
Beverage and Tobacco Product Manufacturing in Franklin County, NY (312)	10	0.90	1
Amusement, Gambling, and Recreation Industries in Franklin County, NY (713)	31		13
Executive, Legislative, and Other General Government Support in Franklin County, NY (921)	49		22

Source: [jobsEQ@](mailto:jobsEQ@)

Data as of 2017Q4 unless noted otherwise

Note: Figures may not sum due to rounding.

18

Below is a table with more detailed information on the previously selected repetitive occupations. Since the manufacturing sector is a special case in that it was not selected as part of the analyzed industries based on the same criteria as the others, CAI included the information related to the occupations pertinent to the manufacturing industries as well even though those occupations are not necessarily pertinent to many other industries within the group. These occupations are highlighted in blue.

Occupation Snapshot in Franklin County, New York, 2017q4														
		Current						5-Year History		5-Year Forecast				
		Four Quarters Ending with 2017q4			-----2017q4-----			Total Change	Avg Ann % Chg in Empl	--Separations--		---Growth---		
SOC	Occupation	Empl	Avg Ann Wages <sup>1</sup>	LQ	Unempl	Unempl Rate	Online Job Ads <sup>2</sup>	Empl	Region	Total New Demand	Exits	Transfer	Empl	Avg Ann Rate
21-1000	Counselors, Social Workers, and Other Community and Social Service Specialists	821	\$44,400	3.13	27	3.5%	59	106	2.8%	466	163	278	25	0.6%
43-6000	Secretaries and Administrative Assistants	466	\$37,100	0.95	19	3.9%	20	4	0.2%	191	117	112	-38	-1.7%
11-9000	Other Management Occupations	758	\$78,500	1.44	11	1.4%	23	38	1.0%	277	155	127	-5	-0.1%
43-9000	Other Office and Administrative Support Workers	474	\$30,400	0.91	39	7.5%	7	5	0.2%	215	127	125	-37	-1.6%



Occupation Snapshot in Franklin County, New York, 2017q4														
		Current						5-Year History		5-Year Forecast				
		Four Quarters Ending with 2017q4			-----2017q4-----			Total Change	Avg Ann % Chg in Empl		--Separations--		---Growth---	
SOC	Occupation	Empl	Avg Ann Wages <sup>1</sup>	LQ	Unempl	Unempl Rate	Online Job Ads <sup>2</sup>	Empl	Region	Total New Demand	Exits	Transfer	Empl	Avg Ann Rate
31-1000	Nursing, Psychiatric, and Home Health Aides	616	\$27,800	1.92	51	7.7%	9	-116	-3.4%	369	191	160	18	0.6%
43-4000	Information and Record Clerks	550	\$32,300	0.75	43	7.0%	25	14	0.5%	305	143	176	-14	-0.5%
49-9000	Other Installation, Maintenance, and Repair Occupations	345	\$42,000	0.90	21	5.2%	16	-22	-1.2%	150	64	96	-10	-0.6%
51-9000	Other Production Occupations	134	\$33,500	0.40	11	5.7%	2	-7	-1.0%	58	26	46	-13	-2.1%
51-3000	Food Processing Workers	68	\$31,600	0.65	5	6.6%	1	0	-0.1%	36	16	24	-5	-1.6%
53-7000	Material Moving Workers	275	\$30,300	0.46	44	11.9%	4	-4	-0.3%	167	69	109	-11	-0.8%

Source: [JobsEQ@](#)

Data as of 2017Q4 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Occupation wages are as of 2016 and should be taken as the average for all Covered Employment

2. Data represent found online ads active within the last thirty days in any zip code intersecting or within the selected region; data represents a sampling rather than the complete universe of postings.

## Occupation Snapshot Conclusion

To begin identifying the existing transferable skills between the selection of industries, CAI identified the occupations that are in the top 10 in terms of employment, of at least three out of the ten industries. These occupations are listed below, starting with those that are relevant to the highest number of selected industries:

- Other Management Occupations (11-9000)
- Counselors, Social Workers, and Other Community and Social Service Specialists (21-1000)
- Nursing, Psychiatric, and Home Health Aides (31-1000)
- Information and Record Clerks (43-4000)
- Secretaries and Administrative Assistants (43-6000)
- Other Office and Administrative Support Workers (43-9000)
- Other Installation, Maintenance, and Repair Occupations (49-9000)
- Food Processing Workers (51-3000)
- Other Production Occupations (51-9000)
- Material Moving Workers (53-7000)

Again, the manufacturing related occupations, namely Other Production Occupations and Food Processing Workers, were selected based on different criteria than the others, as was done for the selection of industries to include the manufacturing industry.

**This group of occupations represents the meaningful existing skill sets for performing industries in Franklin County.**



## Veterans and Correctional Officers

In CAI's discussions with Franklin County representatives, the subject of veterans and correctional officers was brought up. Indeed, veterans and correctional officers usually retire at a relatively early age from their initial occupation and thus represent an incredibly skilled and motivated pool of workers. **In addition, there is a large array of incentive programs, including tax credits and training assistance, to encourage companies to hire veterans.**

### Veterans

CAI spoke with Melissa Baretzky, Associate Business Services Representative, and John J. Hetfield, Local Veterans Employment Representative at the NYS Department of Labor. They act as the liaison between veterans looking for jobs and companies looking to hire in the region which includes Clinton County, Essex County, Hamilton County, and Franklin County.

Veterans possess a variety of soft and hard skills that enable them to perform in a large number of industries after retirement from the military. Their soft skills include, but are not limited to:

- Ability to learn new skills and concepts
- Strong leadership qualities
- Flexibility
- Strong interpersonal skills and teamwork abilities
- Ability to work efficiently and productively
- Respect for procedures and ability to take orders and instructions
- Accountability and timeliness
- Strong personal integrity

Depending on their particular experiences, their sets of hard skills may include:

- Communications technology
- Security of computer networks and hardware
- Equipment maintenance
- Nursing skills
- Administrative skills

These skills make them ideal candidates for jobs in a number of industries in all company sizes, including but not limited to:

- Production and manufacturing
- Retail management
- Sales
- Maintenance (technology maintenance, electrical maintenance, etc.)
- Medical services
- Transportation

In Franklin County, the majority of veterans using the NYS Department of Labor's services tend to be placed in retail, customer service, and medical service positions, whereas in Clinton County, they are more likely to be placed in production jobs.

In recent years, Ms. Baretzky and Mr. Hetfield have noticed a decrease in veterans seeking their services. In the past, most of the veterans they helped came in to find a job because they were out



of work. Nowadays, veterans seek their help to find a job that suits them better than their current one.

### Correctional Officers

According to Ms. Baretzky and Mr. Hetfield, correctional officers have a set of skills that makes them particularly suited for the following industries after retirement: transportation, manufacturing, construction, and security.

CAI analyzed the Correctional Officers and Jailers (SOC 33-3012) occupation in Franklin County using the Willing & Able tool in JobsEQ, a tool that compares an existing occupation to related occupations in order to gauge career-change criteria. This tool takes into consideration knowledge, skills, and abilities as well as wages. **Below are the top 10 alternative occupations for Correctional Officers and Jailers in Franklin County:**

SOC Code	Occupation Title	Approx. Training Rank
29-2041	Emergency Medical Technicians and Paramedics	1
25-1111	Criminal Justice and Law Enforcement Teachers, Postsecondary	2
33-3051	Police and Sheriff's Patrol Officers	3
33-2021	Fire Inspectors and Investigators	4
21-1092	Probation Officers and Correctional Treatment Specialists	5
19-4092	Forensic Science Technicians	6
53-1011	Aircraft Cargo Handling Supervisors	7
43-5031	Police, Fire, and Ambulance Dispatchers	8
33-9031	Gaming Surveillance Officers and Gaming Investigators	9
29-9012	Occupational Health and Safety Technicians	10

For each one of these occupations, a list of the industries in which these occupations are present in Franklin County can be found below:

SOC Code	Occupation Title	Top Industries in Franklin County that Employ ...
29-2041	Emergency Medical Technicians and Paramedics	<ul style="list-style-type: none"> <li>• Other Ambulatory Health Care Services (57.7%)</li> <li>• Executive, Legislative, and Other General Government Support (21.3%)</li> <li>• General Medical and Surgical Hospitals (17.4%)</li> </ul>
25-1111	Criminal Justice and Law Enforcement Teachers, Postsecondary	<ul style="list-style-type: none"> <li>• Junior Colleges (64.6%)</li> <li>• Colleges, Universities, and Professional Schools (34.5%)</li> </ul>
33-3051	Police and Sheriff's Patrol Officers	<ul style="list-style-type: none"> <li>• Executive, Legislative, and Other General Government Support (81.1%)</li> <li>• Justice, Public Order, and Safety Activities (10.9%)</li> </ul>

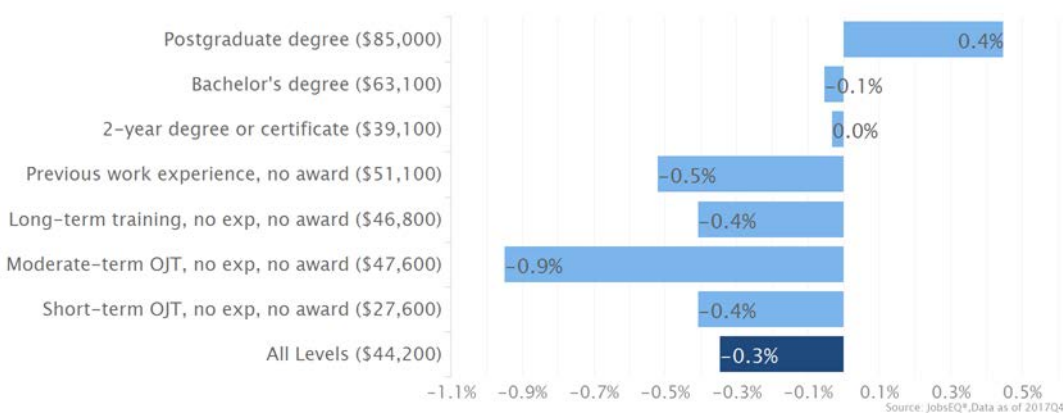


33-2021	Fire Inspectors and Investigators	<ul style="list-style-type: none"> <li>Executive, Legislative, and Other General Government Support (80.7%)</li> <li>Justice, Public Order, and Safety Activities (11%)</li> </ul>
21-1092	Probation Officers and Correctional Treatment Specialists	<ul style="list-style-type: none"> <li>Justice, Public Order, and Safety Activities (49.7%)</li> <li>Executive, Legislative, and Other General Government Support (34.1%)</li> </ul>
19-4092	Forensic Science Technicians	<ul style="list-style-type: none"> <li>Executive, Legislative, and Other General Government Support (54.7%)</li> <li>Justice, Public Order, and Safety Activities (33.2%)</li> </ul>
53-1011	Aircraft Cargo Handling Supervisors	Insufficient data
43-5031	Police, Fire, and Ambulance Dispatchers	<ul style="list-style-type: none"> <li>Executive, Legislative, and Other General Government Support (75%)</li> <li>Other Ambulatory Health Care Service (9.2%)</li> </ul>
33-9031	Gaming Surveillance Officers and Gaming Investigators	<ul style="list-style-type: none"> <li>Gambling Industries (95.4%)</li> </ul>
29-9012	Occupational Health and Safety Technicians	<ul style="list-style-type: none"> <li>Executive, Legislative, and Other General Government Support (25.4%)</li> <li>General Medical and Surgical Hospitals (18.5%)</li> <li>Other Heavy and Civil Engineering Construction (14.7%)</li> </ul>

## Education Overview

Expected growth rates for occupations vary by the education and training required. While all employment in Franklin County is projected to diminish by 0.3% over the next ten years, occupations typically requiring a postgraduate degree are expected to grow 0.4% per year, those requiring a bachelor's degree are forecast to diminish by 0.1% per year, and occupations typically needing a 2-year degree or certificate are expected to neither grow nor contract.

Annual Average Projected Job Growth by Training Required for Franklin County, New York



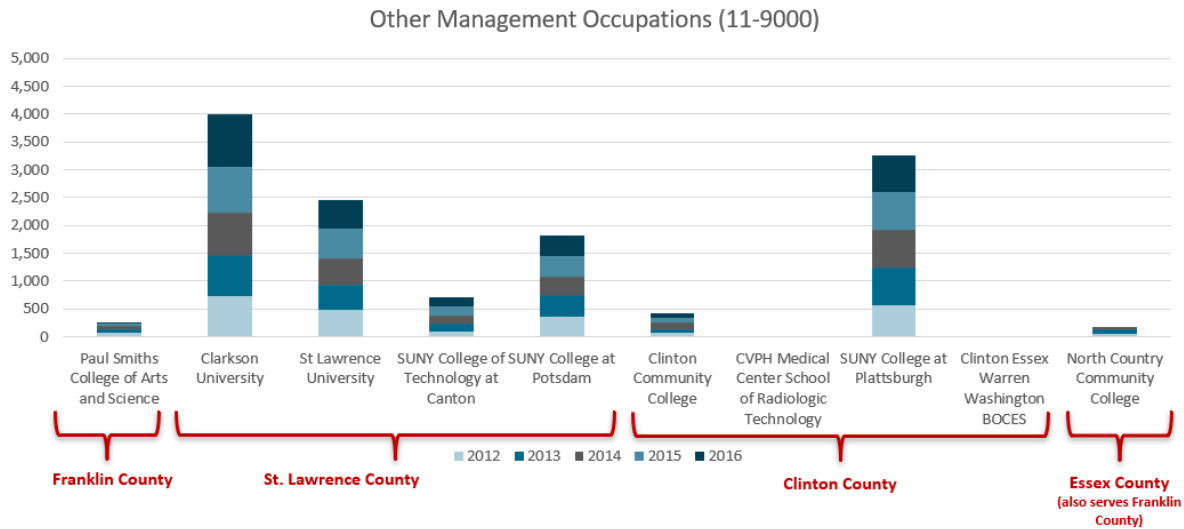
Employment by occupation data are estimates as of the fourth quarter of 2017. Education levels of occupations are based on BLS assignments. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

For each one of the occupations pertinent to the performing industries in Franklin County, a chart showing the diplomas awarded from 2012 to 2016 by educational institutions in the region is

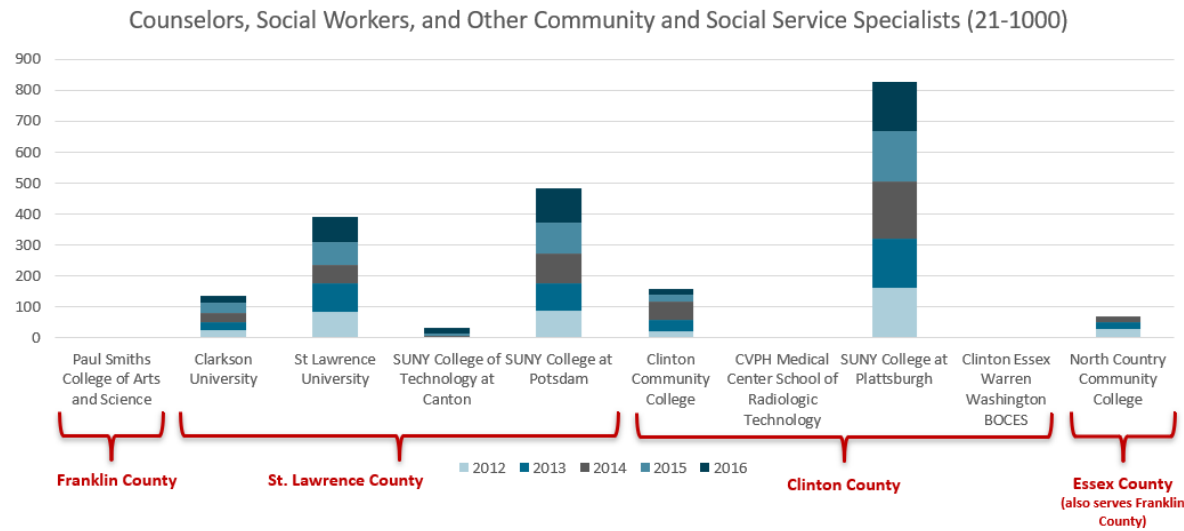




presented. It is important to note that the data included is only from official educational institutions. Therefore, training given by the hospital and clinics or by organizations such as the Trudeau Institute are not taken into consideration within this data.



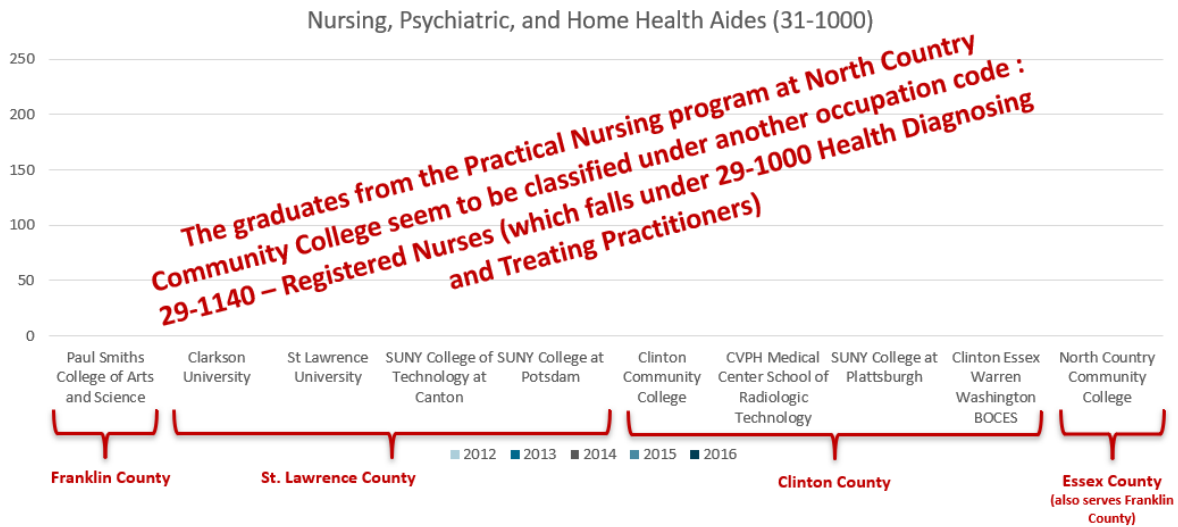
Source : [JobsEQ](#), Data as of 2017Q4, analysis by CAI Global



Source : [JobsEQ](#), Data as of 2017Q4, analysis by CAI Global

For Other Management Occupations and Counselors, Social Workers and Other Community and Social Service Specialists, there are a few graduates from Paul Smiths College and North Country Community College. There is also a healthy number of graduates from 2012 to 2016 in neighboring regions, which could provide resources to fill new positions (in those disciplines) should these industries experience growth.

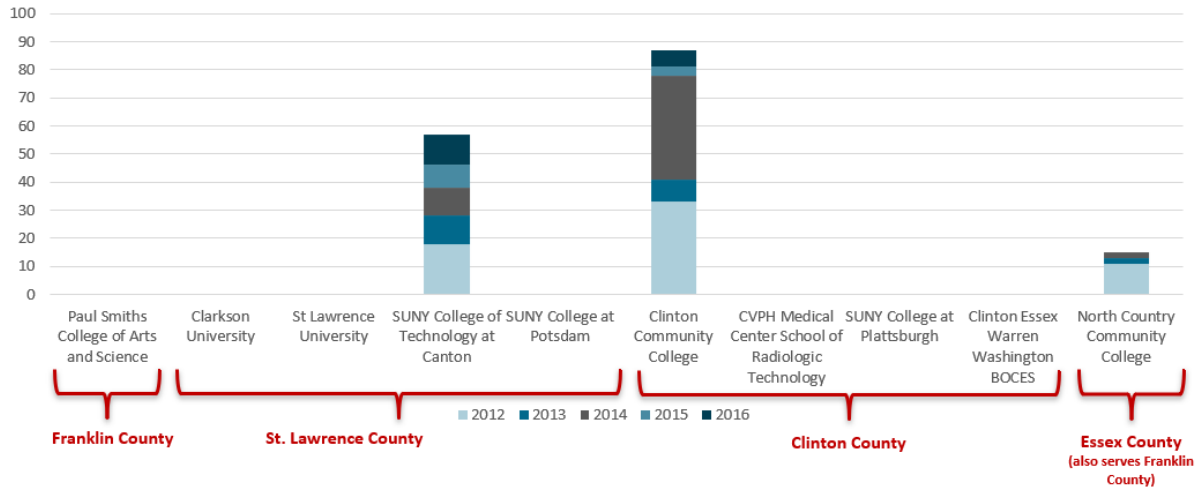




The case of the Nursing, Psychiatric, and Home Health Aides is a special one. There seems to be a disconnect between the occupation data and the graduation data: although there are a good number of workers in the region, there appears to be no data on diplomas awarded in Franklin County, St. Lawrence County, or Clinton County. Knowing that the Practical Nursing program at the North Country Community College produces graduates every year, it appears that those graduates seem to be classified under another occupation code: Registered Nurses (29-1140), which falls under the Health Diagnosing and Treating Practitioners (29-1000) category rather than the Nursing, Psychiatric, and Home Health Aides (31-1000) category. Furthermore, the data does not take into consideration nursing training done directly at clinics or hospitals. Therefore, although the data does not clearly show it, there is a good number of nursing graduates in Franklin County.

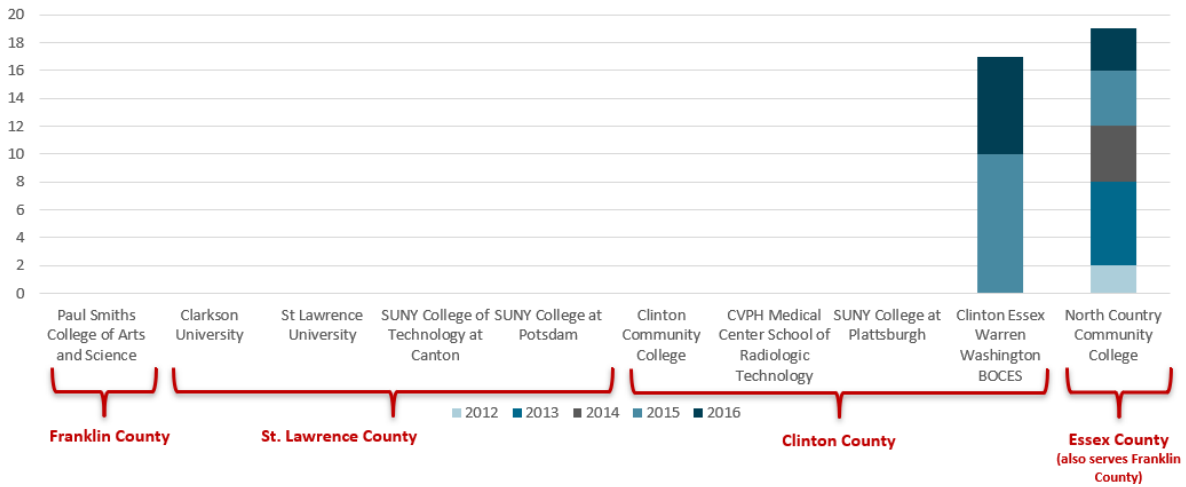


### Information and Record Clerks (43-4000)



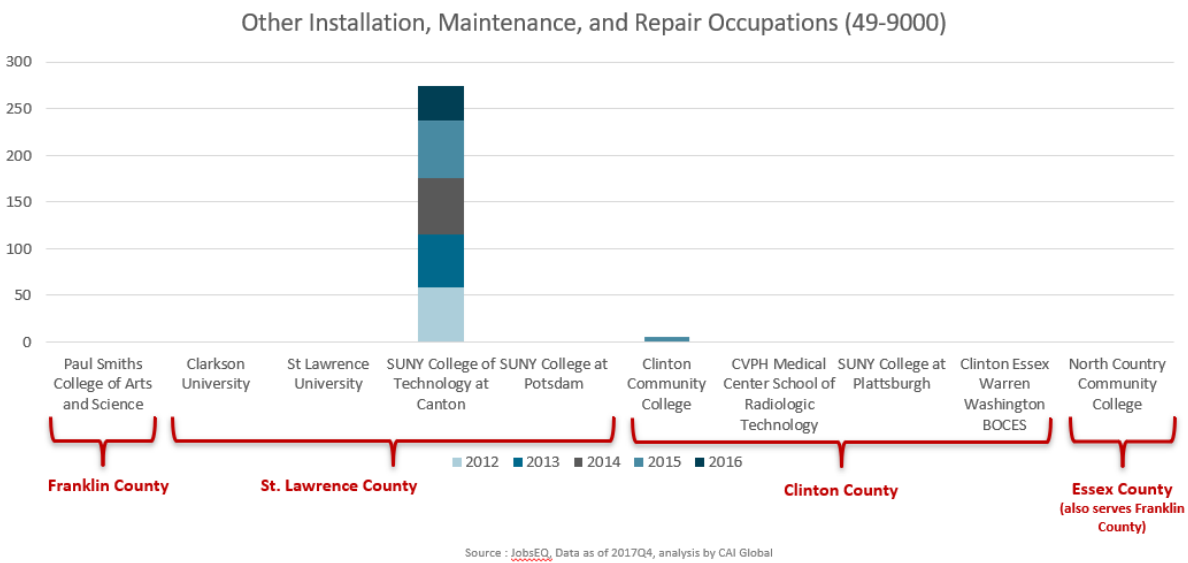
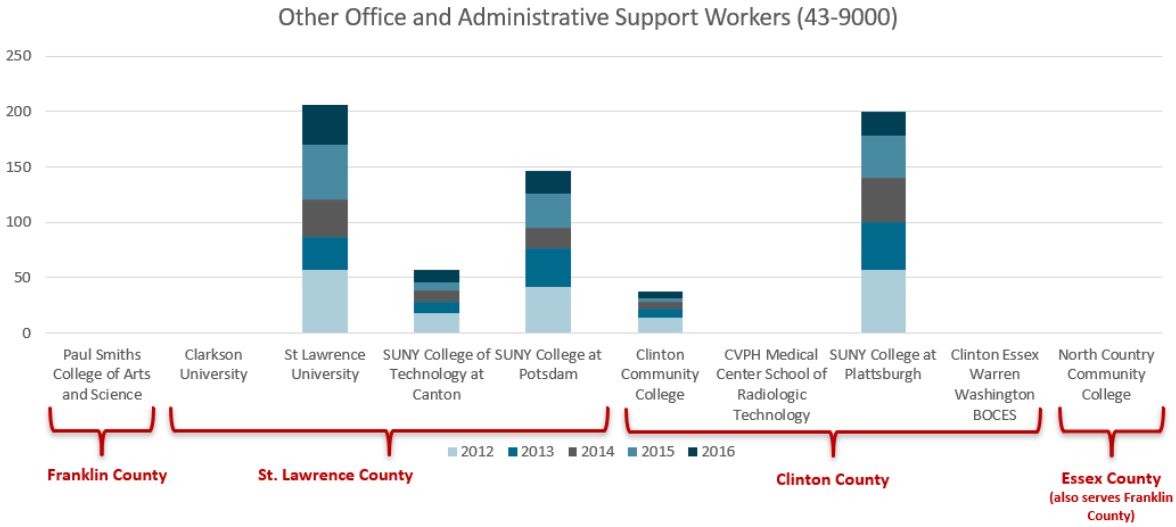
Source : [JobsEQ](#), Data as of 2017Q4, analysis by CAI Global

### Secretaries and Administrative Assistants (43-6000)



Source : [JobsEQ](#), Data as of 2017Q4, analysis by CAI Global





In the case of Information and Record Clerks, Other Office and Administrative Support Workers, and Other Installation, Maintenance and Repair Occupations, there was a healthy number of graduates every year from 2012 to 2016 in neighboring counties. As for Secretaries and Administrative Assistants, although there is a low total number of graduates, potential jobs in that field could be filled by graduates in the Information and Record Clerks or Other Office and Administrative Support Workers fields, which have a high rate of graduates.

## Conclusion

To identify Franklin County’s meaningful existing skill sets, CAI began the process by identifying the most performing industries in the region in terms of LQ. The team then identified the most important occupations for each one of these recognized industries. Finally, among those occupations, an analysis was performed relating to which occupations were useful to the highest number of industries in order to identify transferable skills. Having identified the meaningful existing skill sets, the next step was to identify whether or not these skills are useful for targeted industries.



# INFRASTRUCTURE ANALYSIS

The information in this section is based primarily on CAI’s expertise in investment project strategy and site selection acquired by working with clients from both the private and the public sectors and from a multitude of industries for over 30 years.

Multiple other sources of information are also included in this analysis, including but not limited to:

- The recent site selection Requests for Proposals (RFPs) received by Franklin County for various projects in 2017 and 2018;
- Information gathered by the CAI team during its visit of Franklin County in May, during which there were site visits as well as discussions with key members of the community.

## Statistics Analyzed for Infrastructures

This analysis began with a review of a typical real estate data request for a building or greenfield site that would be included in a typical Request for Information (RFI):

SITE INFORMATION	
<b>SITE NAME</b>	
<b>CITY</b>	
<b>ADDRESS (OR GEO COORDINATES)</b>	
<b>Ownership</b>	
Please list property owner(s)	
Is the owner's property represented by a broker? If yes, please provide contact information.	
<b>Sale Price</b>	
Is the property available for Sale? (Yes/No)	
What is the asking Sale price?	
<b>What are the historic Sale prices (please include copies of deeds)</b>	
<b>Site Description</b>	
Size of proposed site (gross & usable acreage)	
Current Zoning	
Surrounding Area Zoning	
Present Use	
Prior Use	
Describe Adjacent and Surrounding Uses and Tenants	
<b>Building Description</b>	
Size of proposed building	



<b>SITE INFORMATION</b>	
Building dimensions: length, depth and height of the building (metres or feet)	
Ceiling height	
Any truck loading dock(s) drive-in door(s), interior docks?	
Description of office facilities	
Parking capacity	
Description of aeration system (HVAC)	
Year of construction	
Description of materials used in construction: <ul style="list-style-type: none"> <li>▪ Floors</li> <li>▪ Walls</li> <li>▪ Roof</li> </ul>	
Columns and beams (along with spacing)	
Condition of property	
Sprinkler system	
Lighting system	
Security (fencing, swipe card access, cameras, etc.)	
<b>Environmental / Geological</b>	
Please answer Yes/No to the presence of issues below. If yes, please describe:	
Located in flood plain	
Wetlands	
Archaeological issues/features	
Environmental, contamination issues	

In general, the most important information related to the land and building for an investor is:

- Size of the land and building;
- Condition of the land (environmental assessment) and condition of the building;
- Ceiling height;
- Columns;
- Loading docks.

For transportation, the needs largely depend on the investor's principal transportation method used to ship and receive materials. They might require:

- Proximity to a highway or more particularly to an interstate highway. The investor may ask for information on any current or planned construction on the roads surrounding the site;
- Proximity to rail or rail spur on site. The investor may ask for the nearest rail yard, the main lines and information on any planned upgrades to rail services in the area;

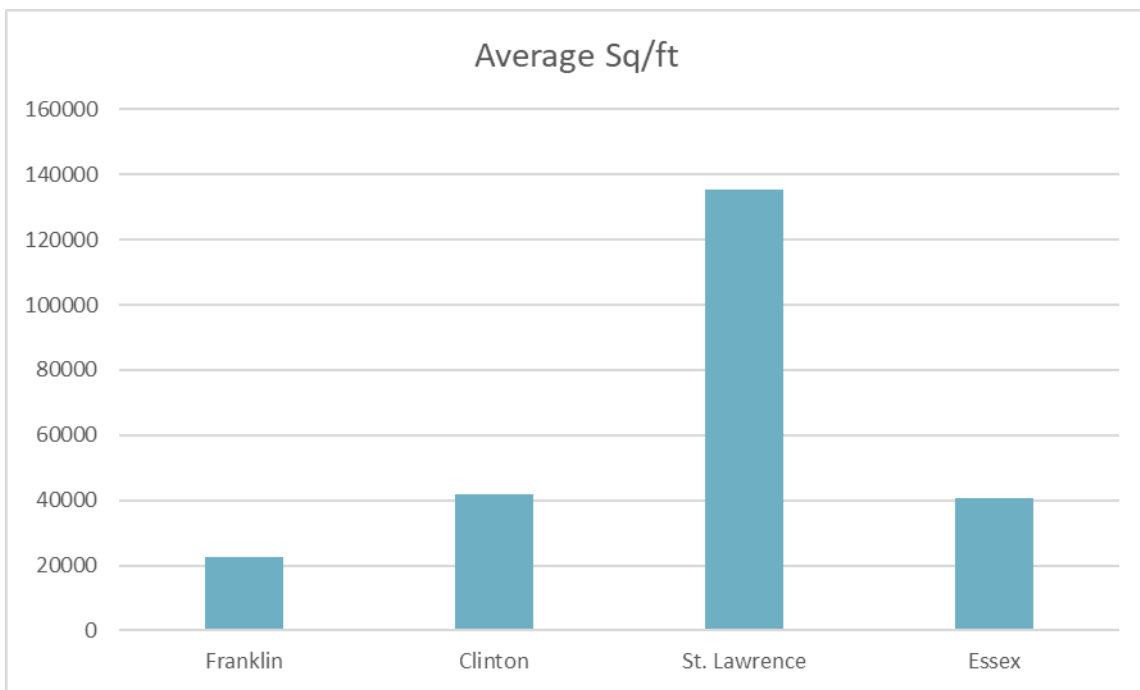


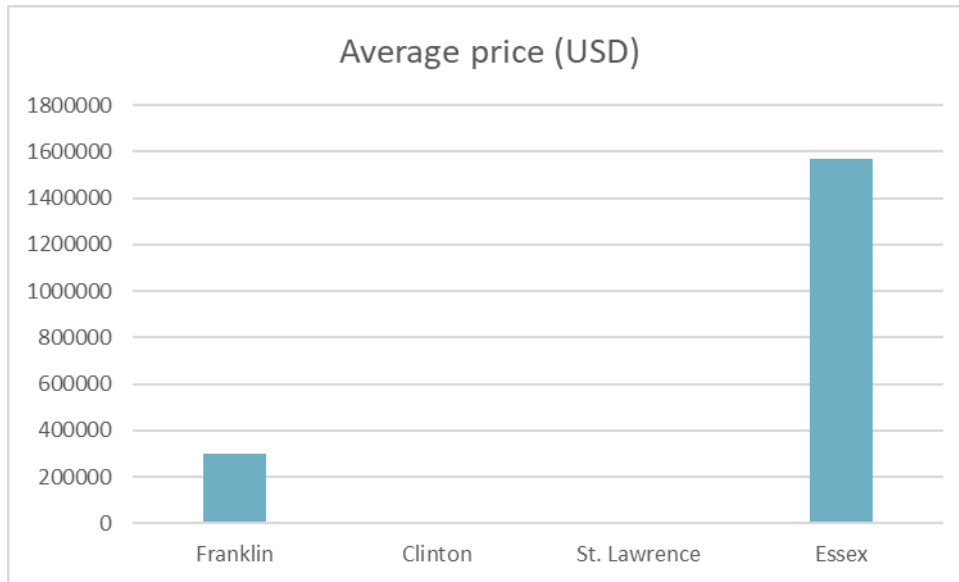
- Proximity to an important port. The investor may ask for the names of the terminals and information on warehousing space at the port);
- Proximity to a local or international airport. Proximity to an airport may be required both to receive and ship materials and for the transportation of people.

Finally, when it comes to telecommunications, investors typically require high-speed Internet connection, sometimes with a preference for fiber optics.

## Comparison with Neighboring Counties

To facilitate the comparison, an inventory of the buildings and land available in Franklin County, Clinton County, St. Lawrence County and Essex County was sent with this report. Although the information is not complete enough to reach sound conclusions at this stage, below are preliminary comparisons of the average square footage of buildings as well as the average price (no information on price was available for buildings in Clinton and St. Lawrence county):





From this preliminary analysis, it is clear that Franklin County typically has smaller buildings marketed at lower prices than buildings in Clinton County, St. Lawrence County, and Essex County.

A Google Map of all of the available buildings and land identified can be seen at: [https://drive.google.com/open?id=1jWFbTSjYBuxaYBa9y71M37Q\\_8d7B4dvc&usp=sharing](https://drive.google.com/open?id=1jWFbTSjYBuxaYBa9y71M37Q_8d7B4dvc&usp=sharing)

## Infrastructure Needs Specific to Certain Industries

### Warehouse Sizes

Between 2012 and 2017, the average size of new warehouses completed in the U.S. increased by 108,665 sq. ft. and 3.7 feet in height. In 2017, the average size was 184,693 sq. ft. and 32.3 inches in height<sup>1</sup>. Rapidly growing e-commerce sales are the primary driver of this trend, and markets lacking sufficient modern logistics facilities have further potential for expansion to keep pace with this rising demand.

<sup>1</sup> <https://www.cbre.us/research-and-reports/US-MarketFlash-Going-Large-Warehouse-Sizes-Increase-for-Modern-Logistics>



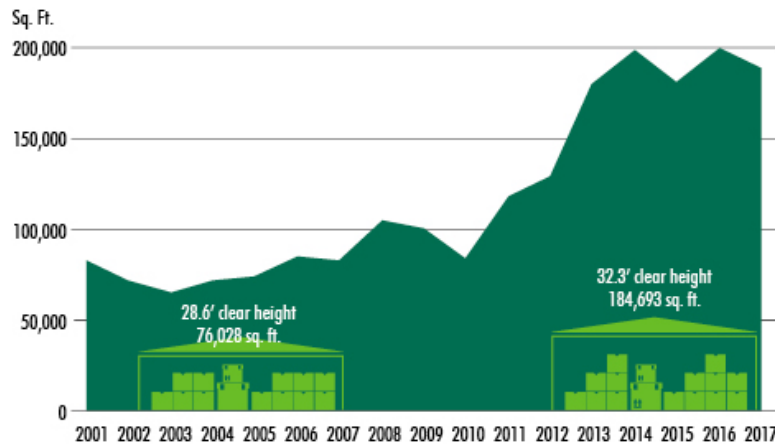


**Figure 2: Warehouse Markets with Largest Average Building Size Increase**

Market	Average Size Increase (SF)	Average New Building Size (SF)		Total New Buildings (MSF)	
		2012-2017	2002-2007	2012-2017	2002-2007
Atlanta	268,423	362,938	94,514	54.8	69.4
Inland Empire	233,416	338,473	105,057	87.7	107.9
Cincinnati	231,232	328,691	97,459	10.8	16.5
Kansas City	206,882	267,778	60,896	24.1	9.1
St. Louis	206,463	289,340	82,877	10.4	18.4
Oakland	163,513	192,799	29,286	6	3.6
Chicago	162,233	283,366	121,133	70	92.4
Columbus	152,763	277,916	125,153	19.7	19.9
Dallas/Ft. Worth	134,613	247,304	112,691	82.8	60.7
Indianapolis	128,205	279,644	151,439	25.4	31
PA I-78/I-81 Corridor	125,020	555,236	430,216	46.6	37
Baltimore	123,486	222,302	98,816	8.2	12.5
Phoenix	118,734	168,245	49,511	24.2	29.1
United States	108,665	184,693	76,028	772.9	975.6

Source: CBRE Research, CBRE Econometric Advisors, 2017.

**Figure 1: U.S. Average New Warehouse Building Size**



Source: CBRE Research, CBRE Econometric Advisors, 2017.

## Infrastructure for the Dairy Product Production Industry

In general, there are many factors a dairy producer would consider when seeking a location, including:

- Availability of suppliers (vets, equipment, feed companies, etc.)
- Land and infrastructure availability and cost
- Proximity to areas that have productive land for forage and grain crops
- Location of processing plants
- Risk management – irrigation areas
- Factors pertaining to the family dynamic beyond the farm, such as their personal support network of family and friends
- Simply personal preference and what they value in a community



- Climate

In New York state, the average size of dairy plants varies between 5,000 and 56,000 sq. ft. Below are examples of average size of dairy companies in New York state<sup>2</sup>:

Company	City	State	Product	Sq. Ft. (*1000)	Cost (millions)
Bartlett Dairy	Queens	NY	Dairy	56	
HP Hood	Oneida	NY	Dairy	50	5
HP Hood	Vernon	NY	Dairy	5	1

In the northeastern region, dairy product manufacturing uses about 1,409 million kWh of electricity and 9 billion Cu. Ft. of natural gas.

## Infrastructure for the Scientific R&D Industry

When designing R&D infrastructure, some features are usually considering:

- Space for open and private offices (may vary between 20,000 and 80,000 square feet)
- Space for laboratories ( $\approx$  20,000 square feet)
- Space for manufacturing space ( $\approx$  20,000 square feet)
- Environmental chamber with set point temperature and humidity
- Microbiology laboratories
- Cold rooms
- Chemical storage
- Waste storage

32

For example, those following R&D/laboratories facilities included:

### Siemens, Norwood (MA)<sup>3</sup>

- 80,000 square feet of open and private offices
- 20,000 square feet of laboratories
- Anechoic chamber for radiated immunity testing
- Environmental chamber with set point temperature and humidity
- A shielded room for a scanning electron microscope
- Microbiology laboratories
- Reagent evaluation laboratories and their associated incubator rooms
- Cold rooms
- Chemical storage
- Waste storage

<sup>2</sup> <https://www.foodengineeringmag.com/ext/resources/Issues/2017/06-June/construction-survey-5.pdf>

<sup>3</sup> <http://mp-architects.com/mpa-news/designing-for-research-development-laboratory-facilities/>



## Nuvera fuel cells, Billerica (MA)

Nuvera, a global leader in the development and advancement of multi-fuel processing and fuel cell technology, acquired 110,000 square feet of space in a former light manufacturing warehouse.

- 40,000 square feet of office space
- 20,000 square foot laboratory
- 19,000 square feet of manufacturing space
- 20,000 square feet for:
  - training center
  - café
  - shipping/receiving area
  - mechanical room
  - lobby/museum
  - common areas

## Goodrich ISR

Goodrich designs, manufactures service systems and components and provides integrated solutions for commercial, regional, business and military aircraft, helicopters and other platforms.

- 200,000 square feet over four floors in two separate buildings
- 125 offices, 400 workstations and 30 conference rooms
- 65,000 square feet of electronic lab and manufacturing areas
- 16-foot ceilings in the manufacturing area
- 400Hz and 50Hz power requirements, and Electrostatic Discharge flooring placement

33

## Infrastructure for the Pet Food Industry (Livestock Production Support Services/ Animal Food Production)

Transportation infrastructure is critical for pet food processing. Access to processing facilities with roads that can handle tractor trailers and access to rail for receiving raw commodities is important.

Below are examples of sizes of facilities in the pet food industry<sup>4</sup>:

Company	Location	Sq. Ft. (*1000)
PetDine	Harvard, Illinois	20
Royal Canin	South Dakota	100
Mars Petcare	Nashville	224

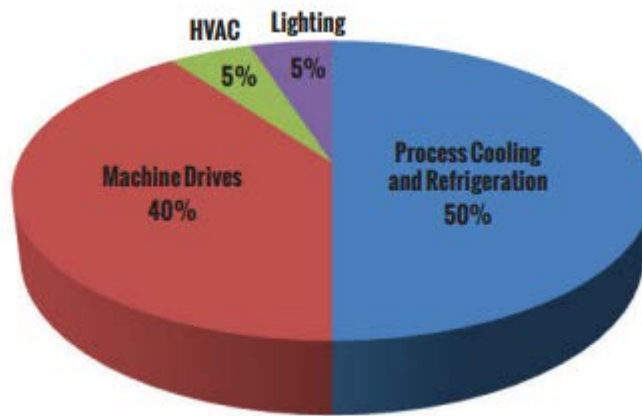
## Utilities in food manufacturing

In a fruit/vegetable plant, fifty percent of the electricity consumed is for process cooling and refrigeration, followed by machine drives (40%), HVAC (5%), and lighting (5%).

<sup>4</sup> <https://www.foodengineeringmag.com/ext/resources/Issues/2017/06-June/construction-survey-5.pdf>



Energy distribution in Fruit/Vegetable plant



Use of Energy by Industry (Fuel and Nonfuel), 2014<sup>5</sup>

NAICS Code(a)	Subsector and Industry	Total(b) (Trillion Btu)	Net Electricity(c) (Million kWh)	Natural Gas(e) (Billion cu ft)	Other(g) (Trillion Btu)
<b>Northeast Census Region</b>					
311	Food	68	5 739	41	1
3115	Dairy Product	16	1 409	9	*
321	Wood Products	62	1 981	5	48

In the northeastern region of the U.S., Food Manufacturing uses 5,739 million kWh of electricity and 41 billion Cu. ft. of natural gas. Dairy product manufacturing uses 1,409 million kWh of electricity and 9 billion Cu. Ft. of natural gas. Finally, the Wood industry uses 1,981 million kWh of electricity and 5 billion Cu. ft. of natural gas.

<sup>5</sup> Consumption of energy in United States, eia.gov



# UTILITIES AND ENERGY ANALYSIS

## Energy Analysis

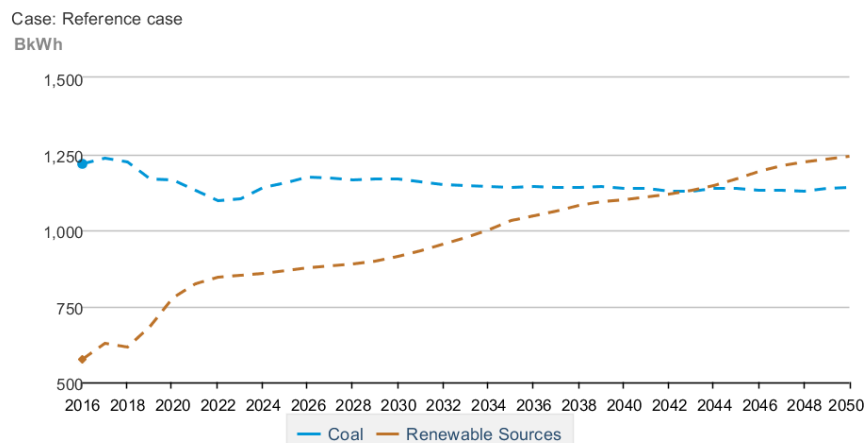
### Statistics Analyzed

#### Electricity (Power only, US) <sup>6</sup>

Comparative analysis and growth projections, 2015-2050 are shown below. Electricity from renewable sources and natural gas are expected to absorb most of the market growth as of 2020.

The State of New York roughly needs 200 BkWh (or 200 TWh) each year.

#### Electricity: Electric Power Sector: Power Only

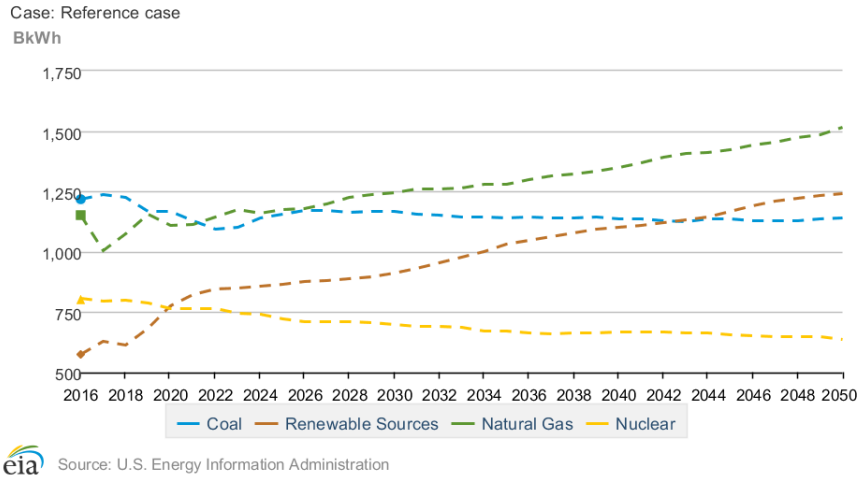


Source: U.S. Energy Information Administration

<sup>6</sup> <https://www.eia.gov/outlooks/aeo/data/browser/>



### Electricity: Electric Power Sector: Power Only



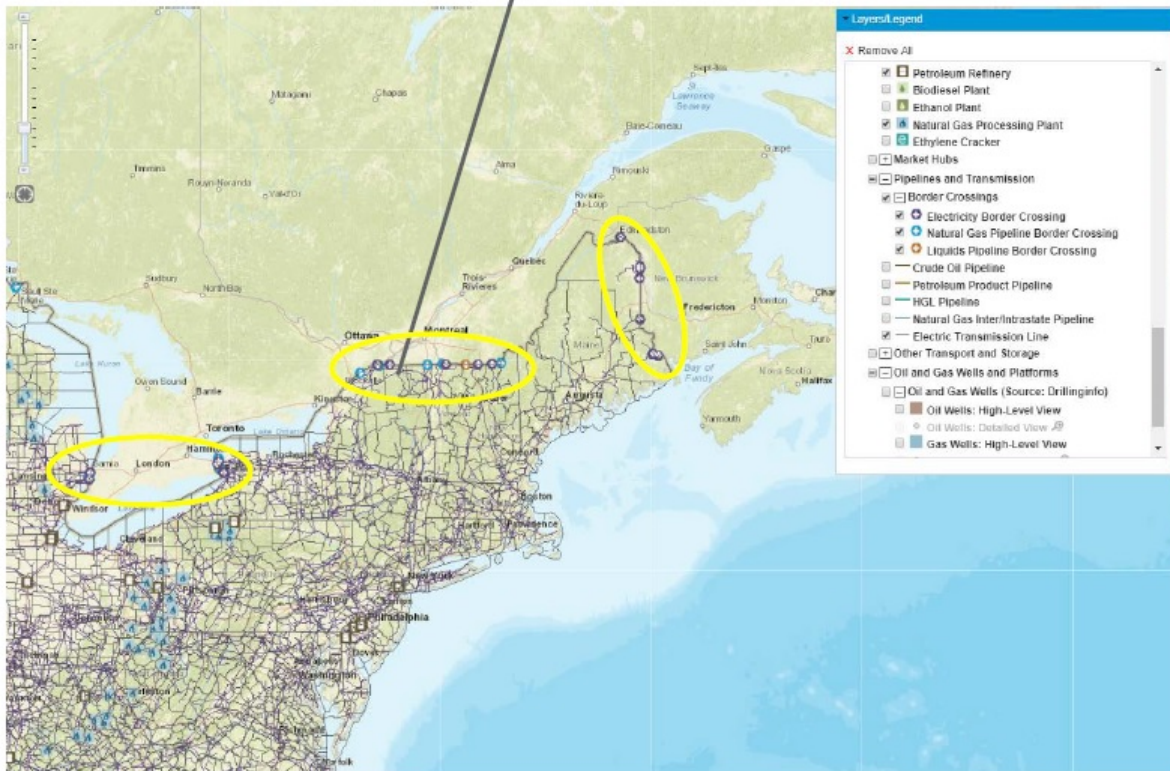
The units are shown as follow:

- Billion Kilowatt Hours (BkWh) or Terawatt Hours (TWh)
  - 1 terawatt hour = 1 million megawatt hour, or 1 billion kilowatt hour

The maps below depict the electric grid of New York State and Boston, Massachusetts area. These areas present some interesting border crossing points for electricity, natural gas pipeline and oil pipelines.



## FRANKLIN COUNTY, NY



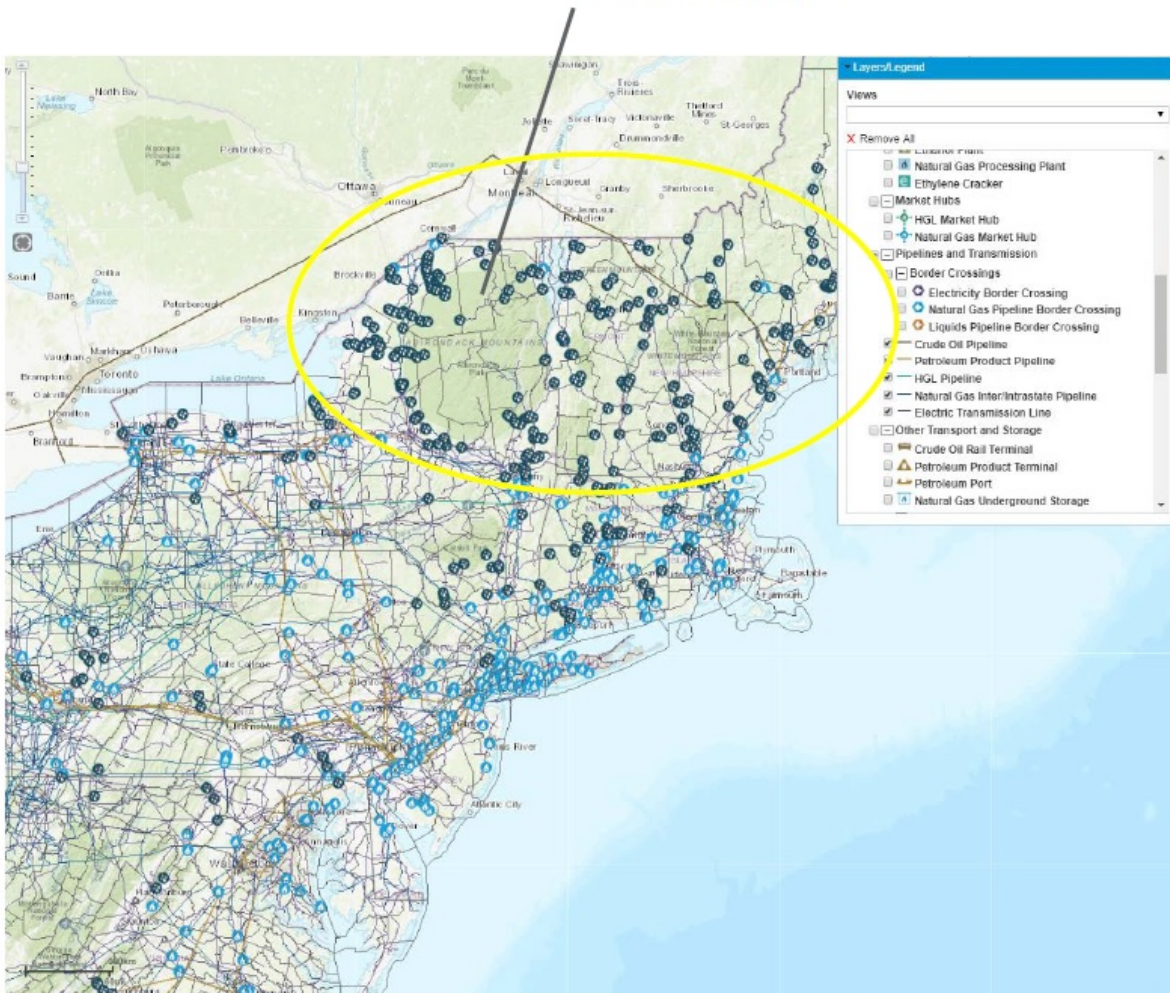
37

**The North Country can very easily be identified by its renewable energy facilities, a unique feature of the area.** Its hydroelectric grid is akin to New England's hydroelectric structure (ISO-NE), as can be seen here.





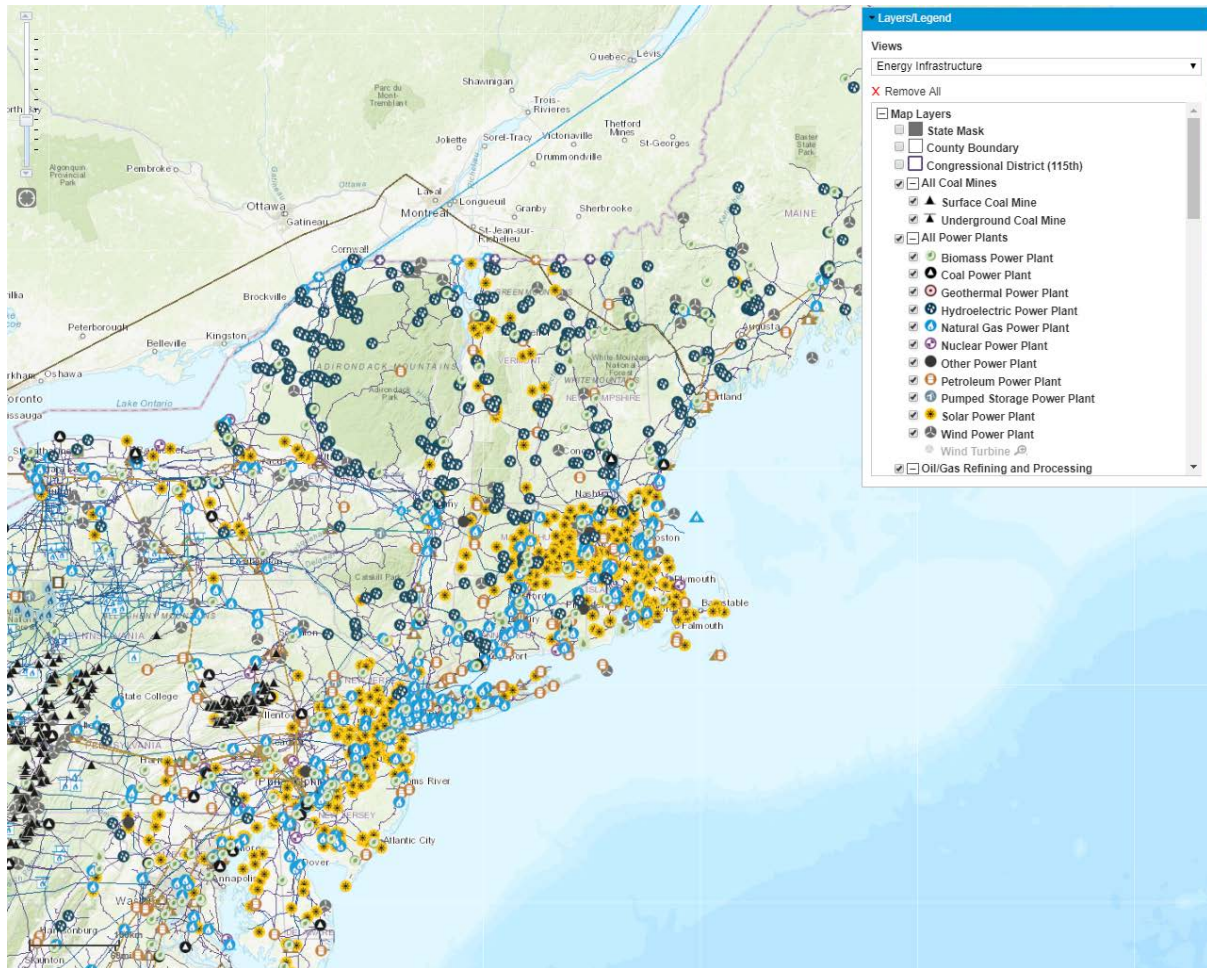
## FRANKLIN COUNTY, NY



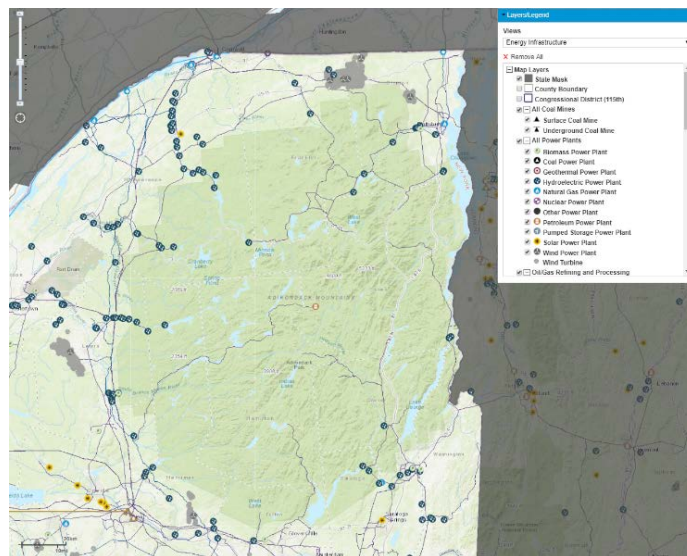
An interesting differentiation factor, from a site selection perspective, is that the North Country can be very easily recognized by the density of its hydroelectric and wind turbine facilities, given the fact that other areas are mostly specialized in natural gas (Western State of New York, in light blue) or solar panels (New York City and Boston areas, in yellow.)







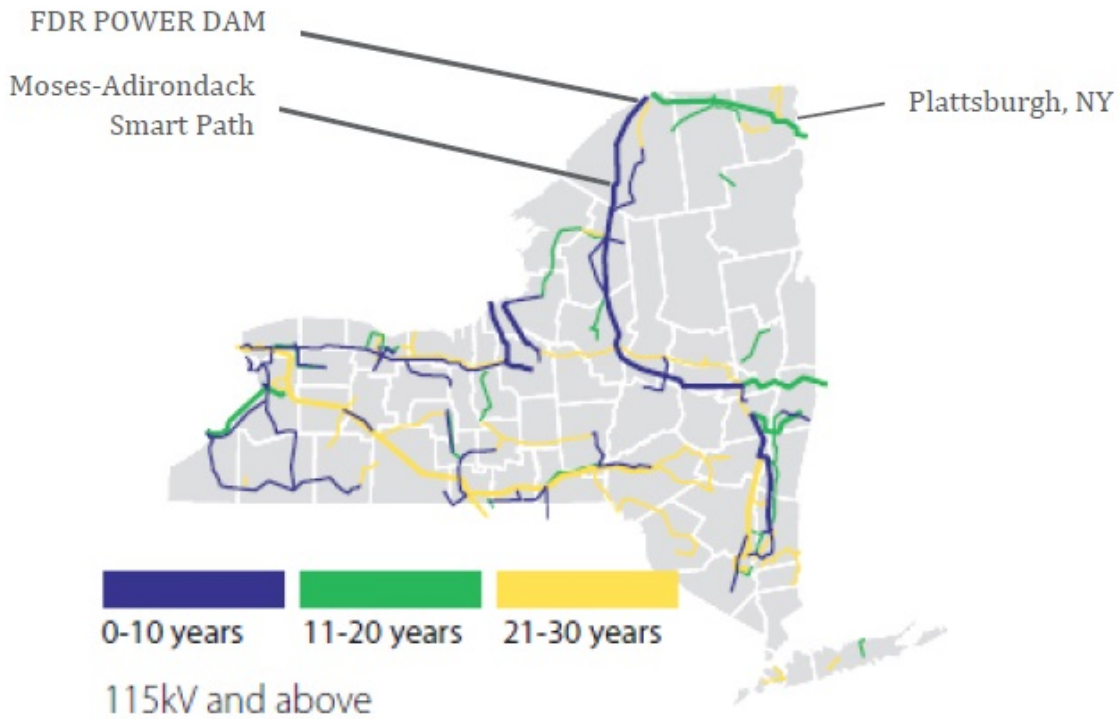
Wind turbine parks can be seen in grey, on the following map.



## Life Expectancy and Ageing of the Electric Grid in the State of New York

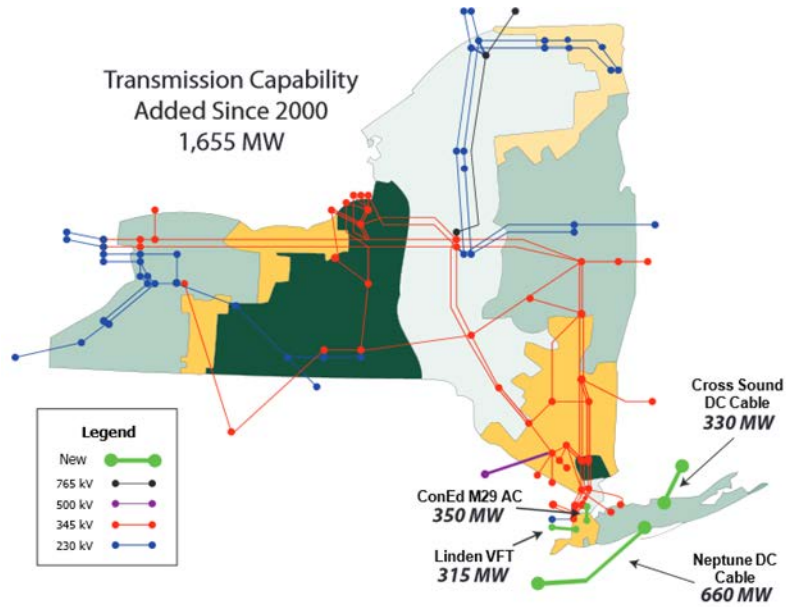
As soon as the North-South Moses-Adirondack 230 kV line steel pole structures are replaced, by 2023 (in dark blue, below), the West-East 230 kV line (in green) connecting the St. Lawrence-FDR Power Dam to the cities of Plattsburgh and New Haven (VT) will have to be renewed as well. Franklin County will be impacted by these new infrastructures.

Most of the 345 kV NYISO west and downstate lines (in yellow, below) are new.

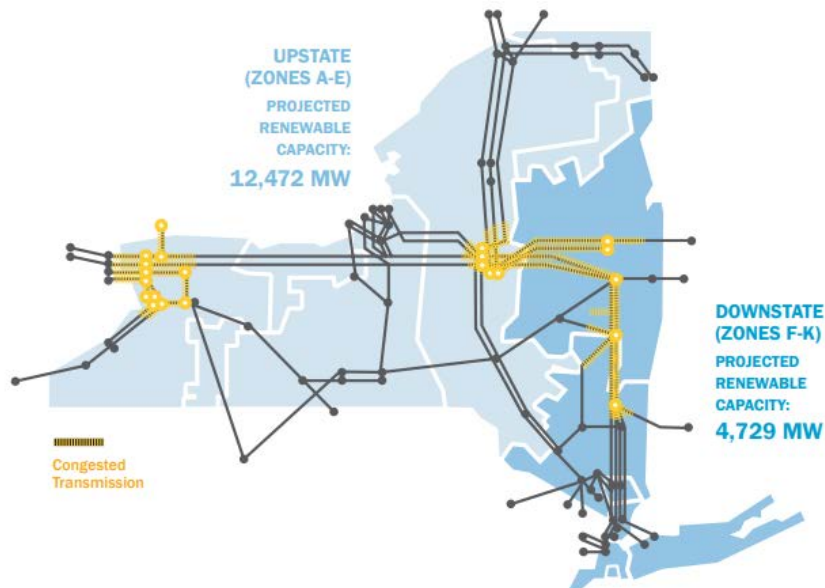


**Life expectancy:** electric grid NYISO.





However, most data indicates a congestion of the electric grid. The North Country could face growing electricity surpluses of renewable energy by 2030 as a result of the congestion of the very few lines leading to downstate regions (bottleneck effect).



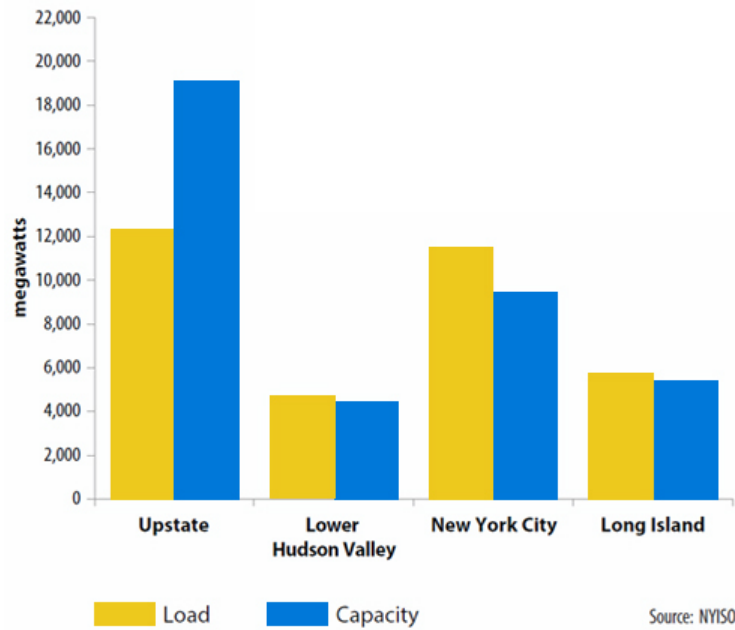
### Surpluses: Upstate vs Downstate NY (2015)

Note: Load = energy demand, Capacity = energy supply.



## LOAD VS. CAPACITY

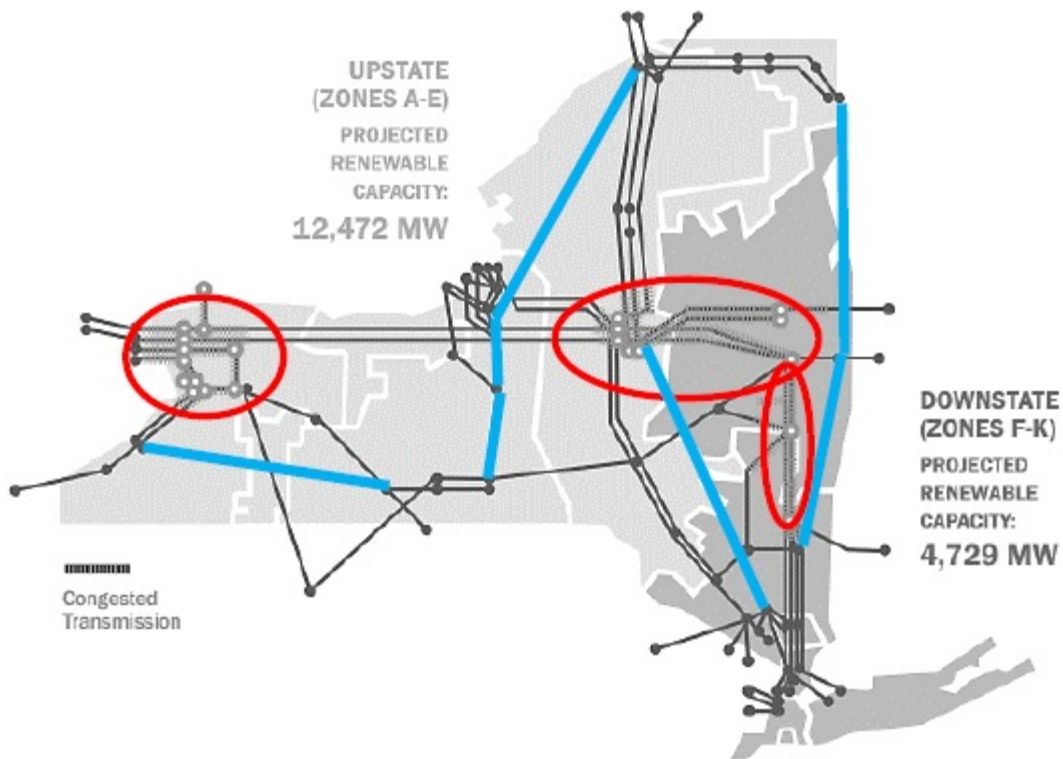
Generating capacity excess upstate, deficit downstate



Source: NYISO, 2015

CAI estimates that in the future, one or several alternative routes for electricity could be added to the existing grid, following many inputs, such as the increase in downstate regions' load, North Country's actual surpluses, the actual and future congestion phenomenon, and NYC officials' will to use primarily renewable energies by 2030 (Clean Energy Standard, CES plan).





Shown above is the hypothetical new routes and completed grid, using redundancy and alternative high-voltage routes (in blue) against congestion nodes (in red).

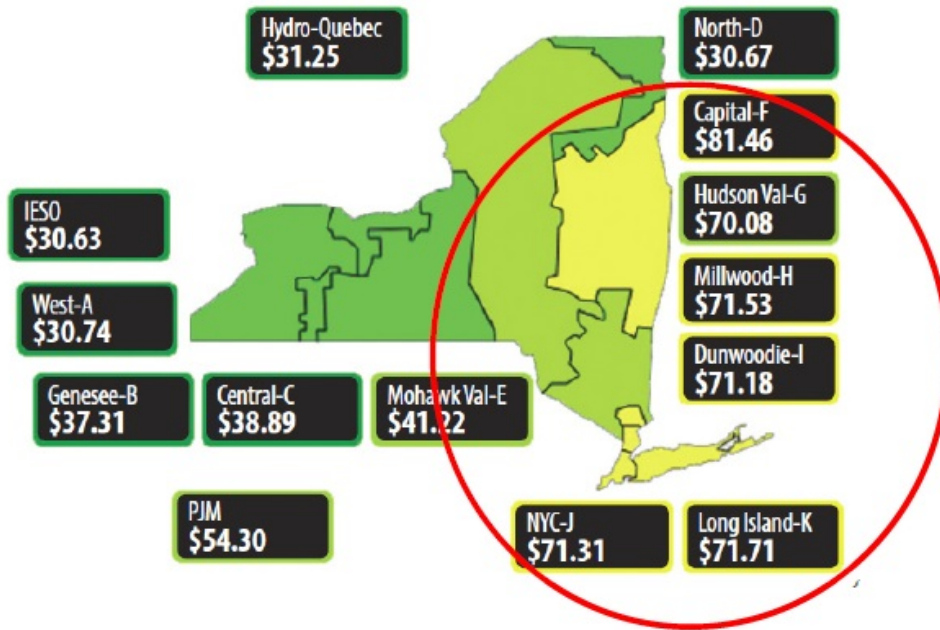
**Cost of Energy, Statewide <sup>7</sup>**

The grid congestion described in the previous section drives the prices down in Upstate New York and in Downstate New York.

<sup>7</sup> <https://www.cenhud.com/poweringny/index>







### Monthly Average Retail Price of Electricity – Industrial

Cents per Kilowatt-hour (¢/kWh)

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
January	6.4	5.9	5.5	6.1	7.4	6.5	7.0	9.0	9.3	9.2	10.9
February	6.6	5.0	6.1	7.8	8.2	7.0	7.0	8.7	9.3	8.9	11.2
March	5.5	5.9	6.0	7.7	6.8	6.6	6.7	7.8	10.6	11.1	8.7
April		5.9	6.0	6.3	6.1	6.0	6.6	7.6	9.1	9.9	11.9
May		6.2	5.8	5.7	5.8	6.9	6.6	7.6	9.6	10.9	11.6
June		6.2	6.7	6.1	6.2	6.4	7.0	7.8	9.8	9.4	12.7
July		5.9	5.6	6.2	6.4	6.3	7.1	8.0	10.3	11.3	14.8
August		6.2	6.3	6.2	6.3	6.6	7.4	8.4	9.8	9.8	14.0
September		6.2	6.2	6.5	6.5	6.4	6.8	7.3	8.6	8.8	12.0
October		6.2	6.0	6.3	6.1	6.4	6.1	7.4	8.7	8.4	11.6
November		5.8	6.6	5.9	6.2	4.6	6.2	6.9	8.3	8.9	8.4
December		5.9	5.8	5.7	6.2	6.0	6.2	7.2	8.5	9.0	8.4

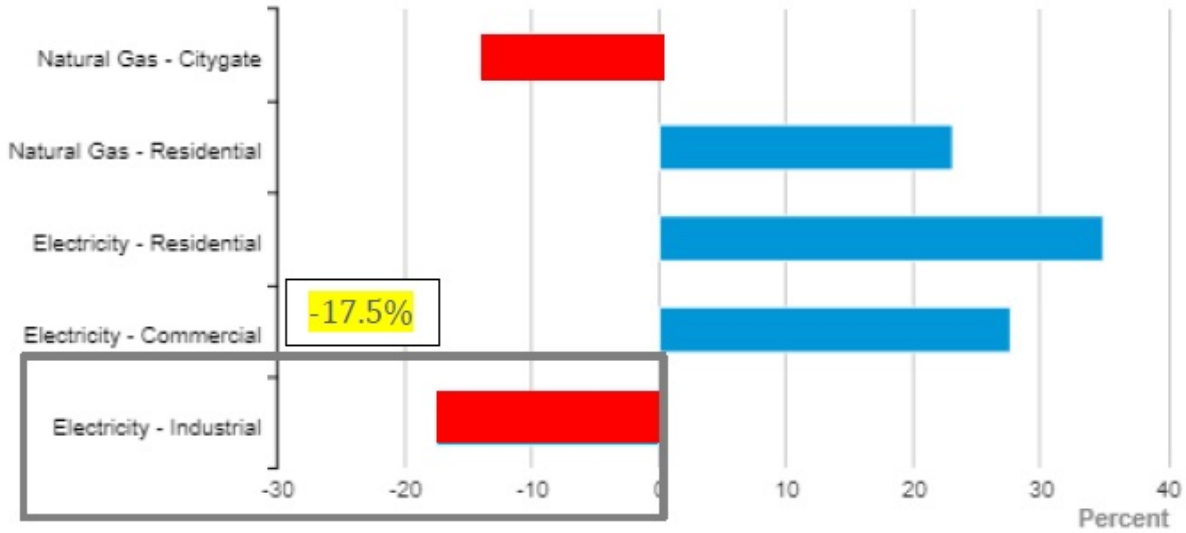
Source: U.S. DOE, Energy Information Administration.

Overall, industrial electricity rates in the State of New York are very competitive. (Please note that the average price shown above can hide local peculiarities - North Country vs Downstate prices will not be shown in the historical state average electricity prices, shown here.)



The general index on the following page shows that New York industrial electricity rates are, on average, 17,5% lower than the nation’s average prices.

**Price Index: Average Energy Prices in NY State vs National Average Price**



	Period	US	NY
<b>Prices</b>			
<b>Petroleum</b>			
Domestic Crude Oil First Purchase (\$/barrel)	Mar-2018	60.68	W
<b>Natural Gas</b>			
City Gate (\$/thousand cu ft)	Mar-2018	3.71	3.19
Residential (\$/thousand cu ft)	Mar-2018	9.79	12.06
<b>Coal</b>			
Average Sales Price (\$/short ton)	2016	30.57	-
Delivered to Electric Power Sector (\$/million Btu)	Mar-2018	2.04	W
<b>Electricity</b>			
Residential (cents/kWh)	Mar-2018	12.90	17.53
Commercial (cents/kWh)	Mar-2018	10.47	13.36
Industrial (cents/kWh)	Mar-2018	6.64	5.48

-17.5%



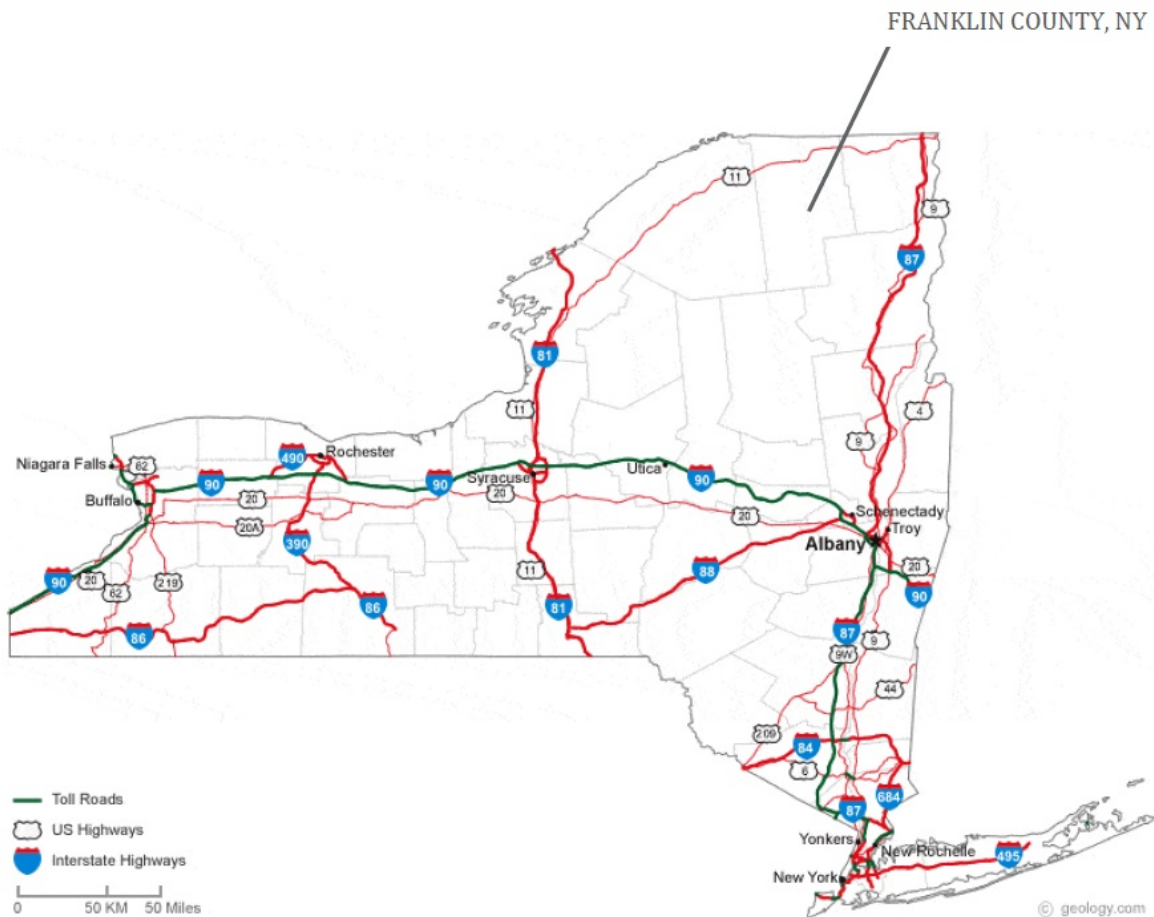
# Roads and Railway Analysis

## Statistics Analyzed

### Access to Local, Regional and Continental Networks

By analyzing different maps, CAI's objective was to identify selling points and assets that could be a decisive advantage for Franklin County. Among these are the Ogdensburg Port, a direct gateway to the St. Lawrence River Seaway, and the CSX continental railway network.

### Interstate Highways, State of New York



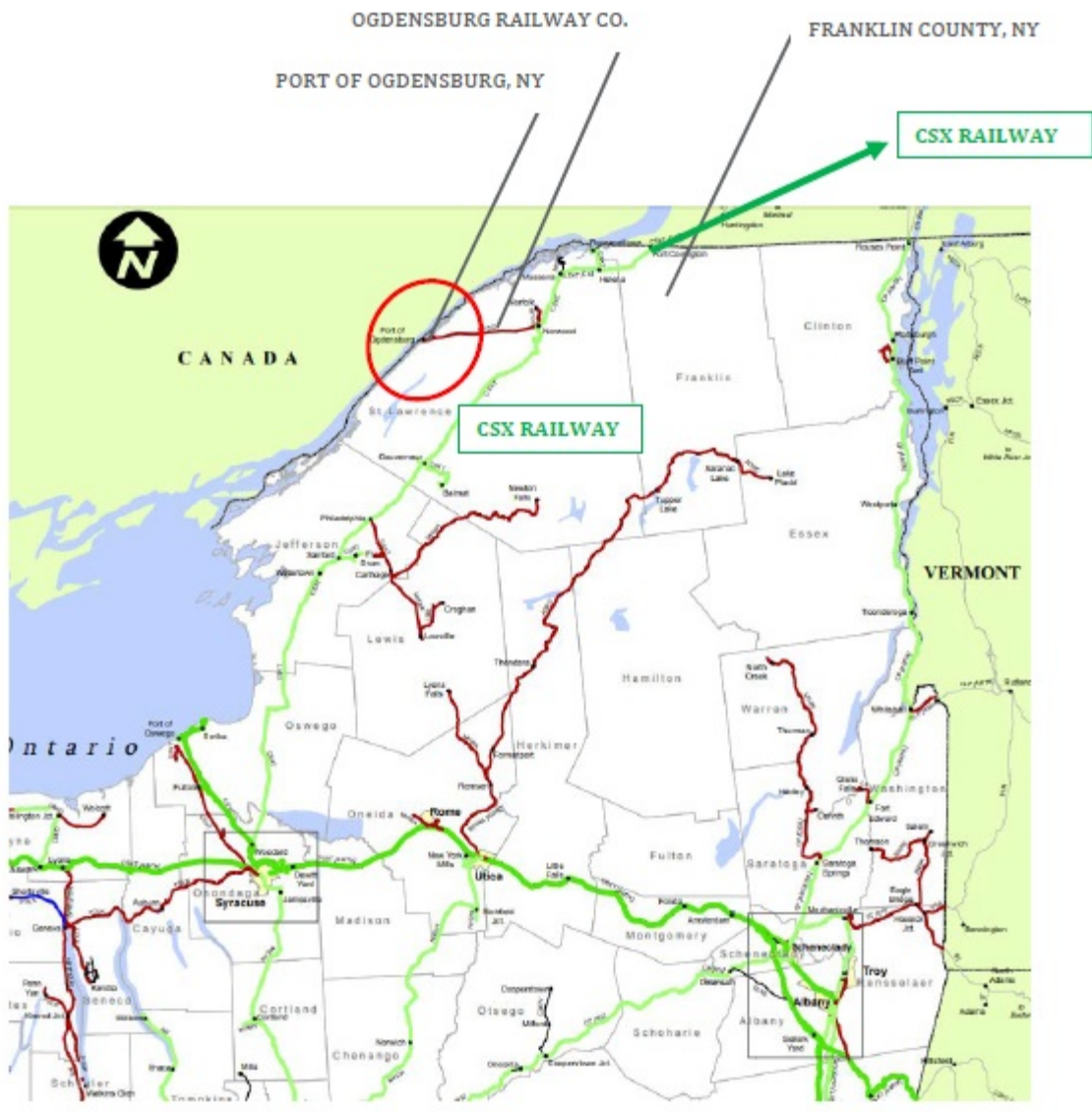
### Railways and Weight Capacities, North Country, NY (2008, detail)

The Vermont Rail System currently owns the existing Ogdensburg rail spur (namely the Ogdensburg Railway Co.) connecting the Port of Ogdensburg to CSX's network.<sup>8</sup>

<sup>8</sup> <http://www.vermontrailway.com/railroads/nyog.html>







**Existing Railways (North Country) and Potential Capacity Addition for the Counties of St. Lawrence, Franklin and Clinton**

A major transportation activity, with the assistance of the North Country Chamber of Commerce, would be to lobby for the addition of a 100 mile added railroad capacity (in blue) to provide direct access to the St. Lawrence Seaway (through the port of Ogdensburg, NY, and Foreign trade zone #118), all the way to Plattsburgh, NY. This added rail spur would be of great value to the North County and Franklin County’s eco-system in attracting investors to the region.



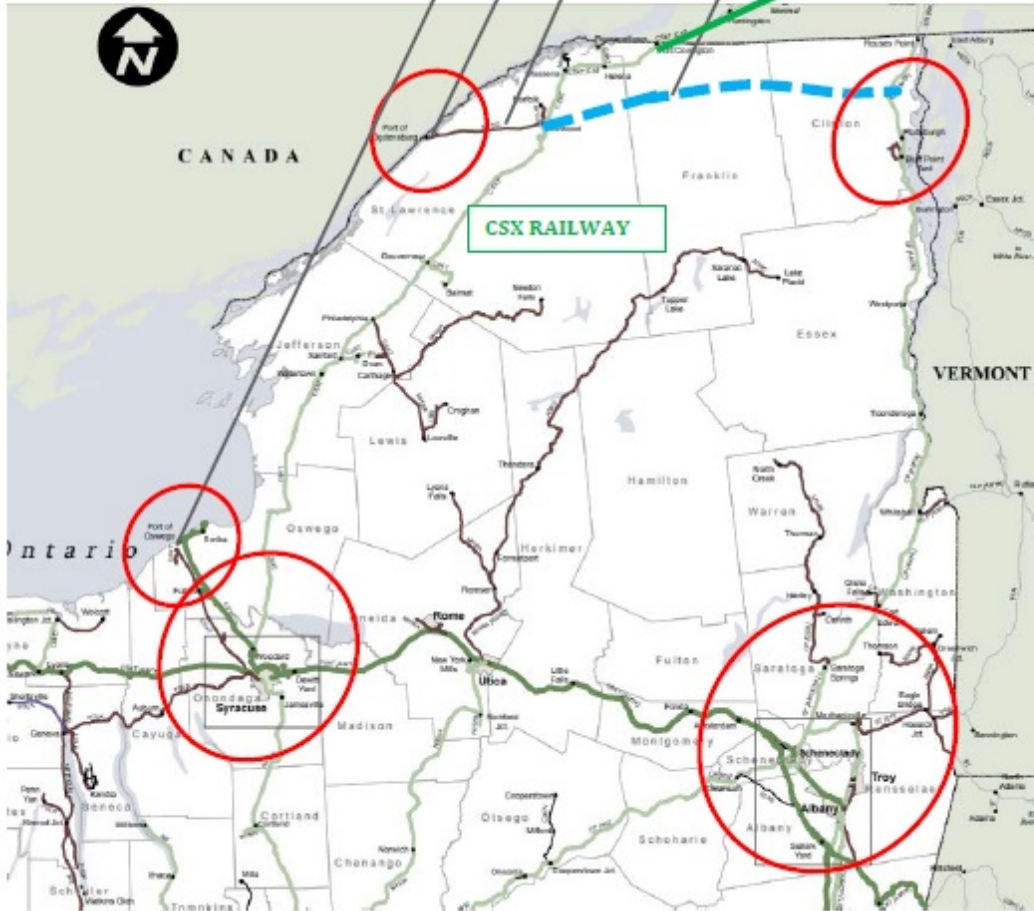
OGDENSBURG RAILWAY CO.

INDUSTRIAL SPUR (PROPOSAL)

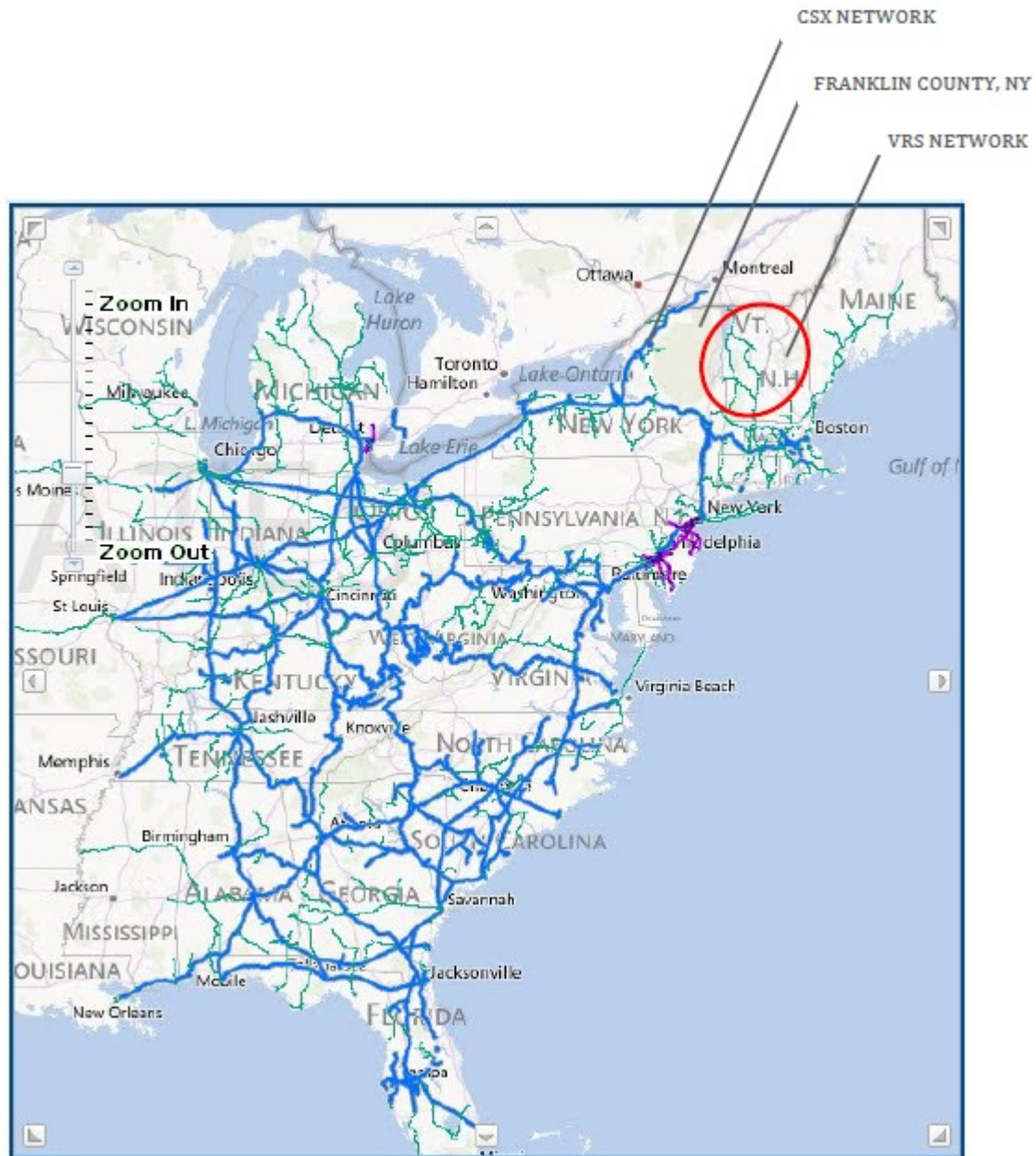
PORT OF OGDENSBURG, NY

PORT OF OSWEGO, NY

CSX RAILWAY



## Existing Networks: Vermont Rail System, and CSX railways (overlap)



## Existing Networks: Regional Central Maine & Québec Railway Network Map

Access to the CSX continental network could be a great opportunity for Franklin County. In the map below, the blue (dotted line) represents the new proposed industrial spur dedicated to Franklin County's industrial capacities. Direct access to Plattsburgh is not mandatory, however, any access to the Port of Ogdensburg, NY, would provide a privileged and unique gateway to the St. Lawrence River Seaway.

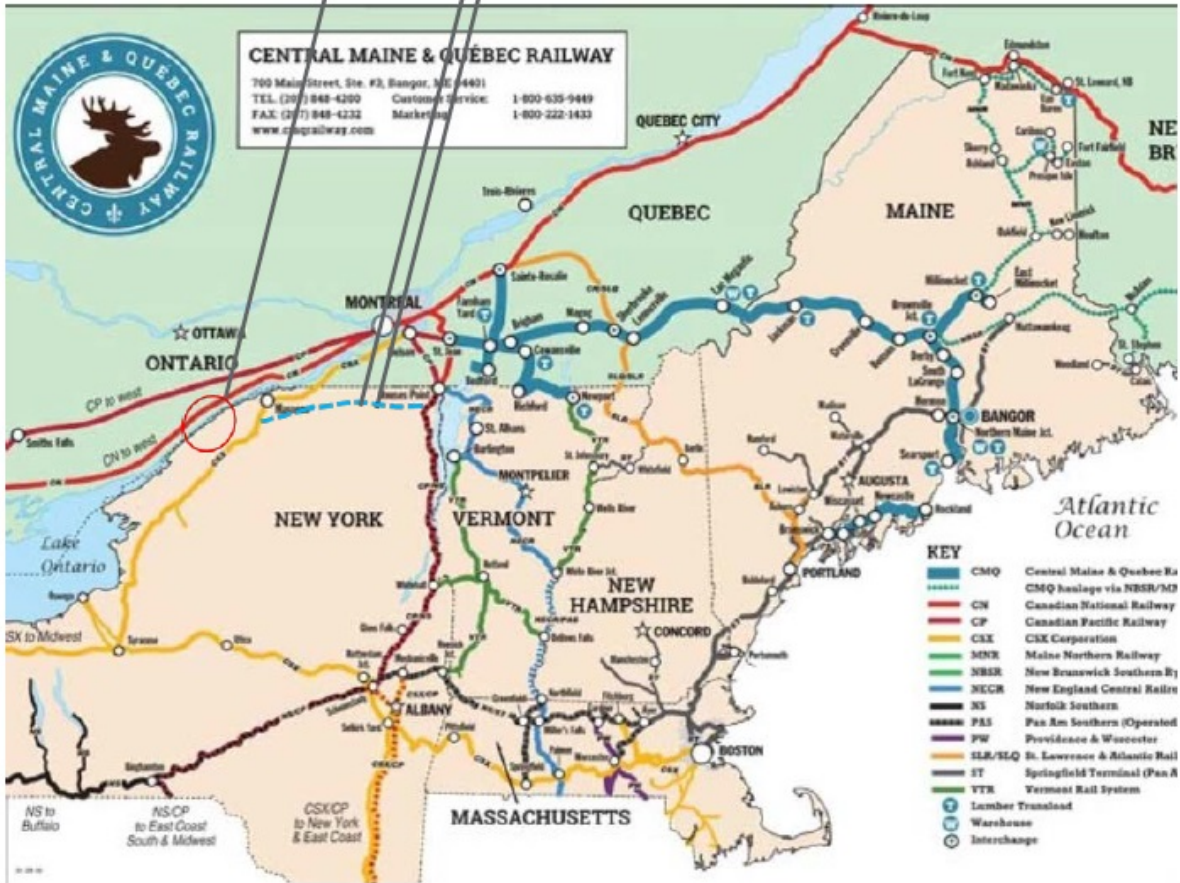




PORT OF OGDENSBURG, NY

**INDUSTRIAL SPUR (PROPOSAL)**

FRANKLIN COUNTY, NY



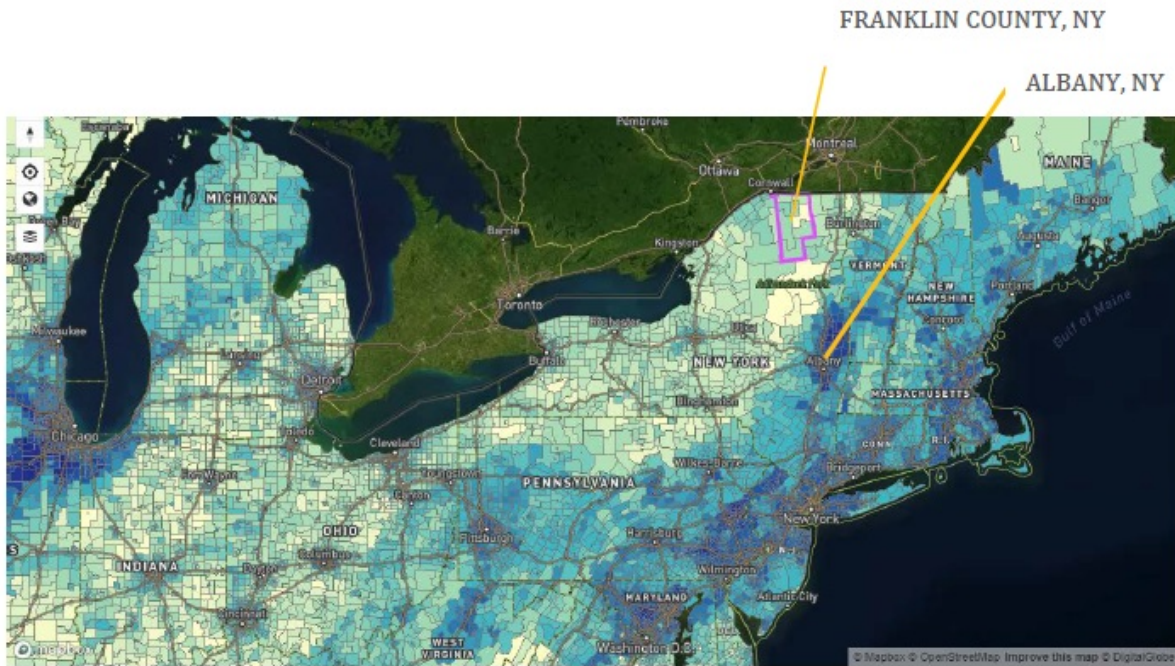
# Optical Fiber and Net Deployment Analysis

## Statistics Analyzed

### Connectivity and Internet Deployment

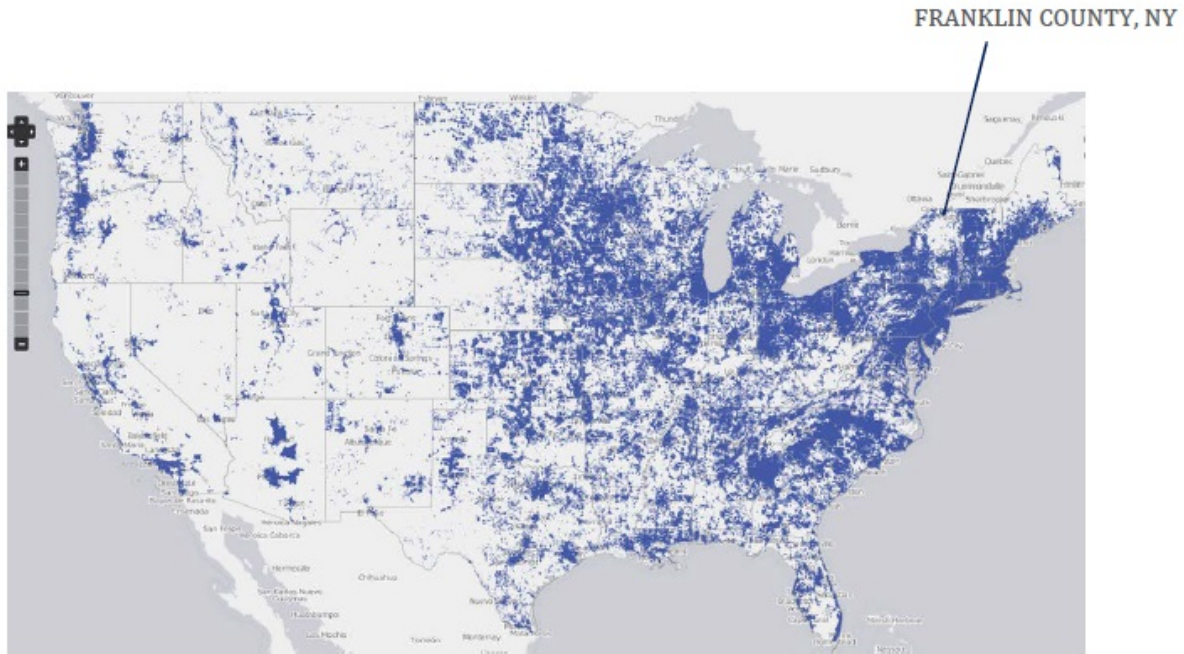
Through different maps depicted below, CAI examined the main internet providers in close proximity to Franklin County.

**Density Map. Regional Internet Providers (Total Internet Providers per area). East Coast.** Clearly, as to the two maps show, there is a lack of internet providers and capacity in and around Franklin County.



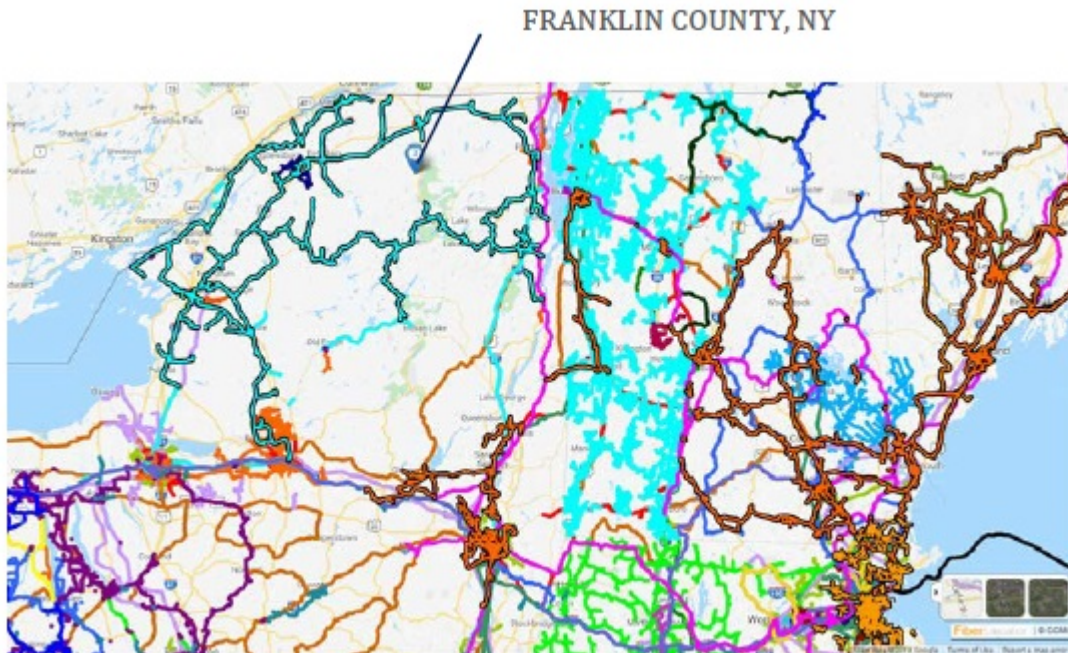


## Density Map. National Internet Deployment



### Regional (or Metro) Internet Providers: All Regional Networks (Overview).

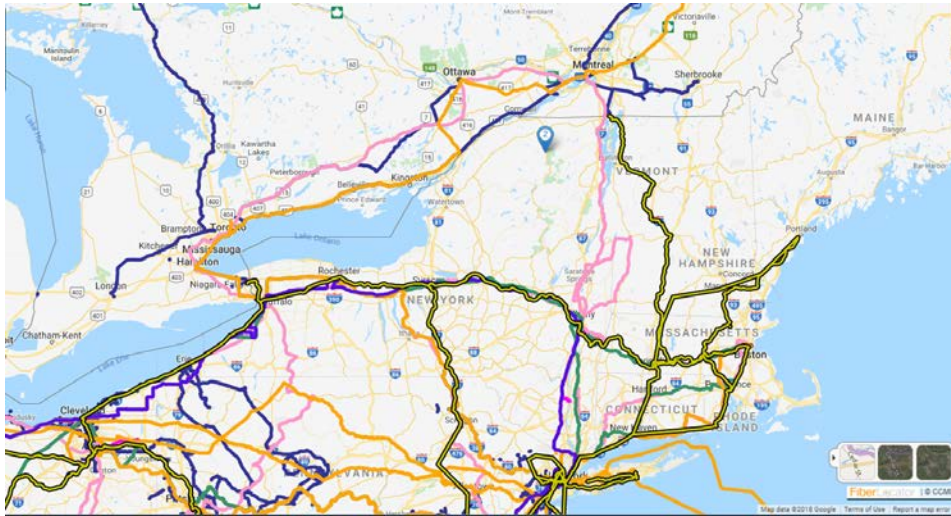
Main regional (metro) internet providers for North Country are shown here: DANC (apple green, below).



### Continental and Intercontinental (Long Haul) Internet Providers.

“Level 3” network (in pink, top), and Sprint network (in light green, bottom).





**Continental and Intercontinental (Long Haul) Internet Providers**  
 Zayo network (dark blue).





## FRANKLIN COUNTY, NY



### Conclusion

As shown throughout the analysis, the region seems to be positioned around major infrastructure hubs. Its low energy costs combined with the vast availability of electricity in the region offers an important competitive advantage that should be built upon.

**Connecting the region to the surrounding railways would offer Franklin County a premium spot in the logistics area** and would also give it access to a maritime seaway and a North American access. This would mainly be profitable for the wood and agri-food industries that need to diversify their markets and for which transportation costs can affect their business case.

The lack of fiber connectivity in the region is, however, an important issue when it comes to attracting new businesses. The fiber connectivity issue could even discourage businesses considering Franklin County despite its low electricity costs.





# CONCLUSION OF THE PRIMARY DATA ANALYSIS

The purpose of this analysis was to identify Franklin County's current strengths in terms of industries and occupations. A list of the industries and occupations identified as being the most important in terms of employment and location quotient can be found in the industry snapshot and occupation snapshot conclusions. Although they show a strong position now in terms of location quotient and employment, the employment within the selected industries is expected to decrease in the next 5 years, with the exception of the Nursing and Residential Care Facilities industry and the Social Assistance industry. As for occupations, the ones within the selected group that are expected to grow over the next 5 years are Counselors, Social Workers, and Other Community and Social Service Specialists as well as Nursing, Psychiatric, and Home Health Aides. The North Country Community College has programs that lead to both of these occupations.

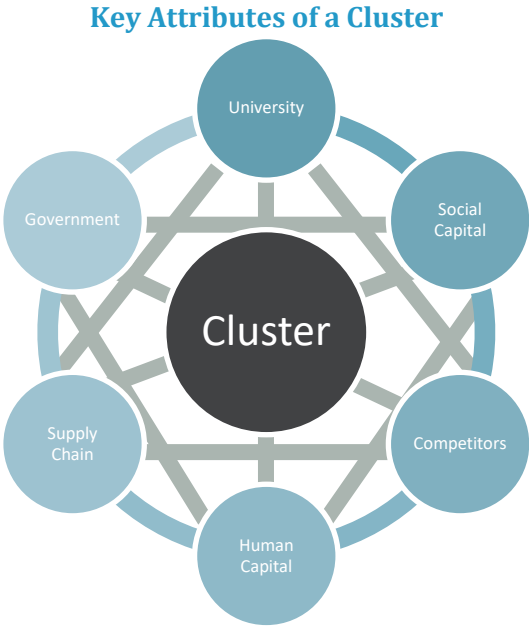
In terms of infrastructure and utilities, Franklin County's main competitive advantage is the largely available and low-cost energy. **Furthermore, Franklin County's location gives it potential to become a logistical hub, as a connection to the surrounding railways would give it prime access to the rail system, maritime seaway, and a generally easier access to more destinations in North America.**



# INDUSTRY SECTORS ANALYSIS

# INTRODUCTION

The term industrial cluster was introduced and popularized by Michael Porter in the 1990 book “The Competitive Advantage of Nations.” An industrial cluster is a geographic concentration of interconnected businesses, suppliers, and associated institutions in a particular field. Clusters are considered to increase the productivity with which companies can compete, nationally and globally, and are very important to economic development. CAI believes that a cluster contains the following key attributes:



In order to have a functional cluster within a jurisdiction, all the above stakeholders must be collaborating and involved. The linkage between a critical mass of stakeholders and attributes within the cluster is essential.

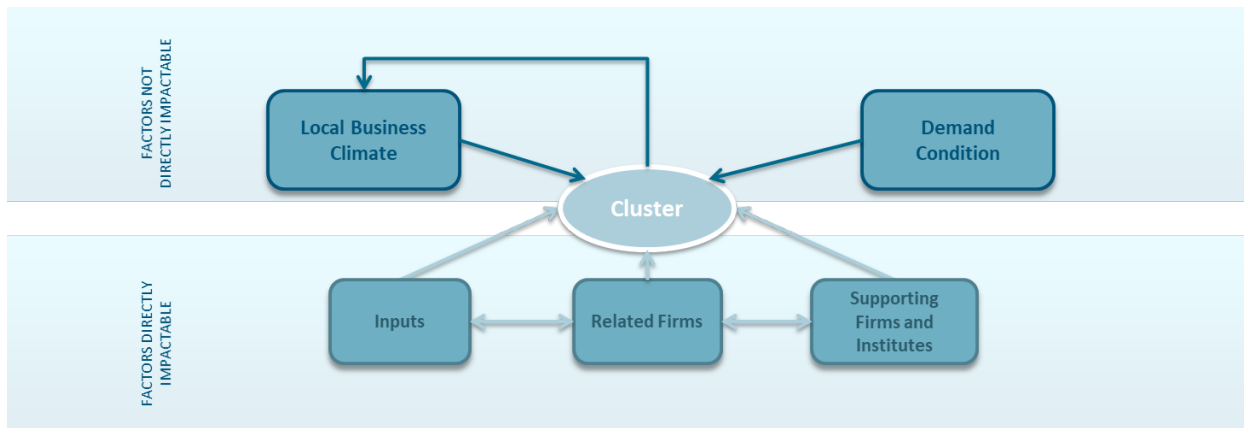
The attributes illustrated in the three bottom circles, the supply chain, human capital and competitors, are the foundation to developing a cluster. The top three circles are a cluster’s other contributing factors. When the government, university and social capital start interacting with the supply chain, human capital and competitors alike, a cluster is in place (this is illustrated above by the web of lines linking each circle).

Franklin County’s business environment is illustrated by the second illustration below.

The following model illustrates the different factors within a cluster and it becomes clearer which factors can be directly impacted and which cannot:

**CAI’S CLUSTER MODEL**





Source: CAI Global Group, 2018. Based on research by Porter (1990, 1998, 2003), Florida (2002), Bourdieu (1980), Tremblay (2004), Hajek (2011) and Niu (2009)

It is very difficult to directly change the local business climate and the demand conditions. It is possible, however, to influence those factors that have a direct effect on these conditions such as the inputs, the related firms and the supporting firms & institutions.

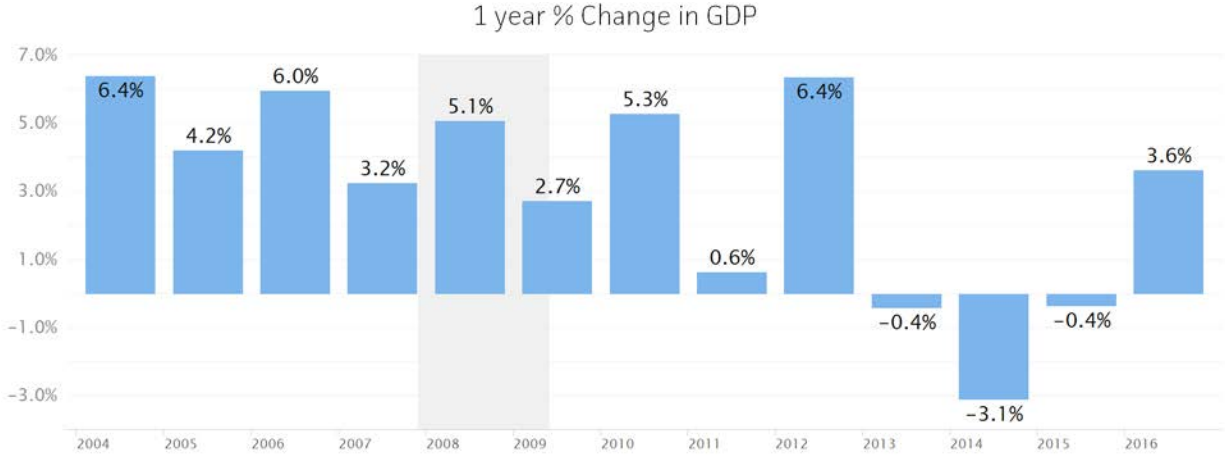
Inputs include human and social capital, R&D infrastructure, information, production infrastructure and utilities & natural resources. Related firms include the supply chain and competitors. Supporting firms and institutions is where Franklin County fits into this model. This also includes government agencies, local community and economic development agencies, research institutes (such as think tanks and universities) and financial service firms such as banks.

The industry cluster in Franklin County with the highest relative concentration is Public Administration with a location quotient of 3.87. This cluster employs 3,567 workers in the region with an average wage of \$56,140. Employment in the Public Admin. cluster is projected to diminish in the region about 0.8% per year over the next ten years.



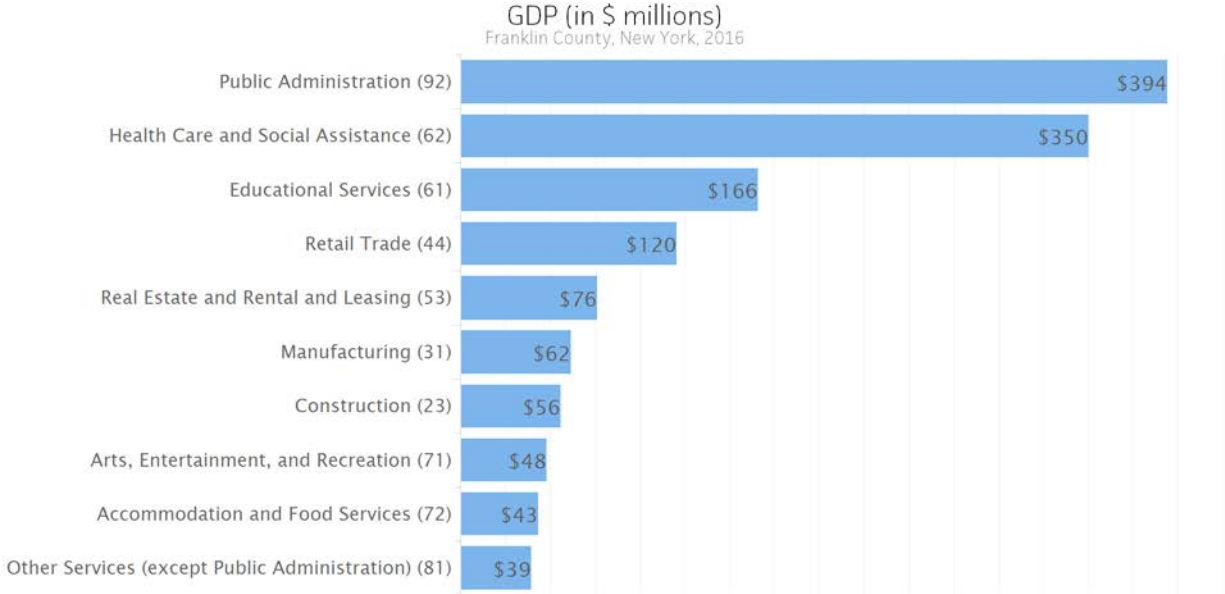
# GROSS DOMESTIC PRODUCT

Gross Domestic Product (GDP) is the total value of goods and services produced by a region. In 2016, nominal GDP in Franklin County, New York expanded by 3.6%. This follows a contraction of 0.4% in 2015. As of 2016, total GDP in Franklin County, New York was \$1,581,620,000.



Gross Domestic Product data is provided by the Bureau of Economic Analysis, imputed by Chmura where necessary, updated through 2016.

Of the sectors in Franklin County, Public Administration contributed the largest portion of GDP in 2016, \$393,861,000. The next largest contributions came from Health Care and Social Assistance (\$349,977,000); Educational Services (\$165,819,000); and Retail Trade (\$120,184,000).



Gross Domestic Product data is provided by the Bureau of Economic Analysis, imputed by Chmura where necessary, updated through 2016.



# INDUSTRIES IDENTIFIED BY CAMOIN - REVIEW

## The Agriculture and Food Processing Sector

The agriculture sector, NAICS starting with 11, differentiates itself from the food processing and food manufacturing sector which is part of the manufacturing sector NAICS 311. The Agriculture, Forestry, Fishing and Hunting sector comprises establishments primarily engaged in growing crops, raising animals, harvesting timber, and harvesting fish and other animals from a farm, ranch, or their natural habitats.

The establishments in this sector are often described as farms, ranches, dairies, greenhouses, nurseries, orchards, or hatcheries. Excluded from the Agriculture, Forestry, Fishing and Hunting sector are establishments primarily engaged in agricultural research and establishments primarily engaged in administering programs for regulating and conserving land, mineral, wildlife, and forest use. These establishments are classified in Industry 54171, Research and Development in the Physical, Engineering, and Life Sciences; and Industry 92412, Administration of Conservation Programs, respectively.

The Manufacturing sector (NAICS 31 to 33) comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The assembling of component parts of manufactured products is considered manufacturing, except in cases where the activity is appropriately classified in Sector 23, Construction.

In terms of economic development attraction strategies, food processors are much more flexible in where they choose to set up a facility. Although they source from the agriculture industry, they may choose to locate closest to urban centers where the customer base is dense. As such, for the purpose of this report, CAI will be looking into the Food Manufacturing sector (NAICS 311).

### Workforce Availability for a Food Manufacturer (NAICS 311)

The average food processor looking to open up a facility of 50 people in Franklin County would require the following workforce:

SOC	POSITION TITLE	NEW EMPLOYER DEMAND
41-2011	Cashiers	1
41-2031	Retail Salespersons	1
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1
43-9061	Office Clerks, General	1
49-9071	Maintenance and Repair Workers, General	1
43-5081	Stock Clerks and Order Fillers	1
11-1021	General and Operations Managers	1
53-3032	Heavy and Tractor-Trailer Truck Drivers	1
35-2021	Food Preparation Workers	1
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	2



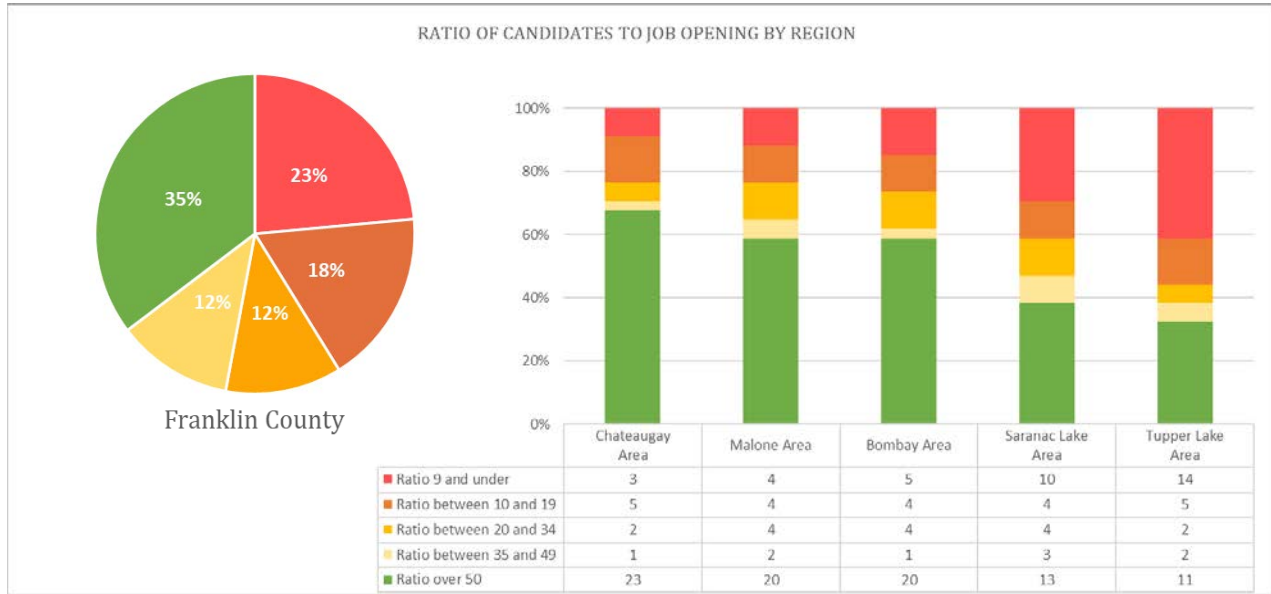
<b>51-2092</b>	Team Assemblers	1
<b>41-4012</b>	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1
<b>35-3022</b>	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1
<b>43-5071</b>	Shipping, Receiving, and Traffic Clerks	1
<b>53-7064</b>	Packers and Packagers, Hand	2
<b>53-7061</b>	Cleaners of Vehicles and Equipment	1
<b>49-9041</b>	Industrial Machinery Mechanics	1
<b>53-7051</b>	Industrial Truck and Tractor Operators	1
<b>51-9061</b>	Inspectors, Testers, Sorters, Samplers, and Weighers	1
<b>51-1011</b>	First-Line Supervisors of Production and Operating Workers	2
<b>51-9198</b>	Helpers--Production Workers	2
<b>51-9111</b>	Packaging and Filling Machine Operators and Tenders	4
<b>51-3091</b>	Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	1
<b>51-9012</b>	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	1
<b>51-9199</b>	Production Workers, All Other	1
<b>51-9023</b>	Mixing and Blending Machine Setters, Operators, and Tenders	1
<b>51-3011</b>	Bakers	2
<b>11-3051</b>	Industrial Production Managers	1
<b>51-3092</b>	Food Batchmakers	4
<b>51-3099</b>	Food Processing Workers, All Other	1
<b>45-2041</b>	Graders and Sorters, Agricultural Products	1
<b>51-3093</b>	Food Cooking Machine Operators and Tenders	1
<b>51-3022</b>	Meat, Poultry, and Fish Cutters and Trimmers	4
<b>51-3023</b>	Slaughterers and Meat Packers	3
<b>Total</b>		<b>50</b>

Source: [JobsEQ®](#)

In order to evaluate the suitability of Franklin County to accommodate such a project, CAI looked at the workforce availability in Franklin County, and within a 45-minute drive of each of its five regions with industrial parks or sites. The evaluation was done on the basis that, for an employer to recruit with ease, each position should have at least 50 candidates. As such, the figure below illustrates in green the percentage of positions (unweighted) that it would be able to fill with ease.



## WORKFORCE SUITABILITY PER REGION FOR THE FOOD MANUFACTURING SECTOR



Source: CAI Global using JobsEQ 2017Q4 data

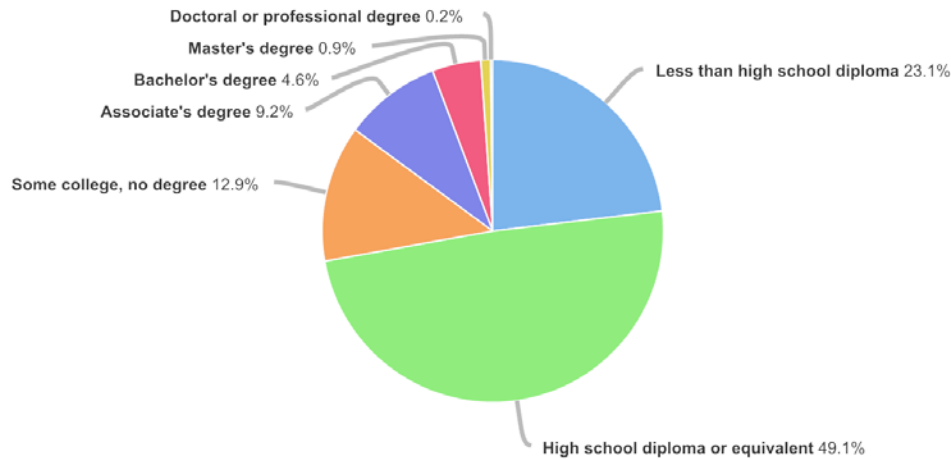
Note: Occupation employment and unemployment are place-of-residence data--that is, referring to workers who reside in the named locality.

For a food manufacturer looking to expand or open a new facility of 50 people, the Chateaugay area would provide the best workforce suitability, however 11 out of the 34 positions would be difficult to recruit. Malone, Bombay, Saranac Lake and Tupper Lake rank 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> in terms of suitability for that type of investment project.

The chart below represents the average educational attainment makeup of the occupations that a new 50 people facility in the food manufacturing industry would require:

### Education Breakdown for What-If Analysis

Franklin County, New York, NAICS 311 - Food Manufacturing



Source: CAI Analytics using JobsEQ 2018Q2 data





## Workforce Availability for a Dairy Product Manufacturer (NAICS 3115)

During the CAI team’s visit to Franklin County, it became clear that the dairy industry occupies an important place in the region’s industry mix. Therefore, a sub-section that is specific to the Dairy Product Manufacturing sector within the Food Manufacturing sector has been included.

The average dairy product manufacturer looking to open up a facility of 50 people in Franklin County would require the following workforce:

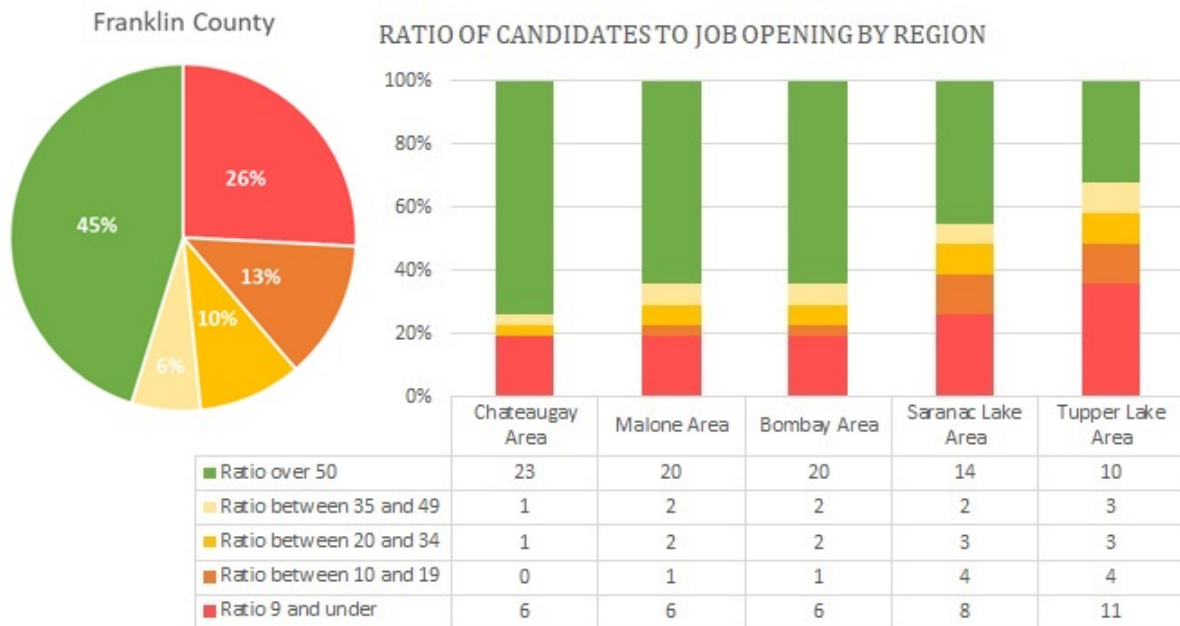
SOC	POSITION TITLE	NEW EMPLOYER DEMAND
11-1021	General and Operations Managers	1
11-3051	Industrial Production Managers	1
19-1012	Food Scientists and Technologists	1
19-4011	Agricultural and Food Science Technicians	1
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	1
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1
43-4051	Customer Service Representatives	1
43-5061	Production, Planning, and Expediting Clerks	1
43-5071	Shipping, Receiving, and Traffic Clerks	1
43-5081	Stock Clerks and Order Fillers	1
43-9061	Office Clerks, General	1
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	1
49-9041	Industrial Machinery Mechanics	2
49-9071	Maintenance and Repair Workers, General	1
51-1011	First-Line Supervisors of Production and Operating Workers	2
51-3092	Food Batchmakers	7
51-3093	Food Cooking Machine Operators and Tenders	1
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	3
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	1
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1
51-9111	Packaging and Filling Machine Operators and Tenders	6
51-9193	Cooling and Freezing Equipment Operators and Tenders	1
51-9198	Helpers--Production Workers	1
53-3031	Driver/Sales Workers	1
53-3032	Heavy and Tractor-Trailer Truck Drivers	2
53-7051	Industrial Truck and Tractor Operators	2
53-7061	Cleaners of Vehicles and Equipment	1
	<b>Total</b>	<b>50</b>

Source: [JobsEQ@](#)



In order to evaluate the suitability of Franklin County to accommodate such an expansion/project, CAI looked at the workforce availability in Franklin County, and within a 45-minute drive of each of its five regions with industrial parks or sites. The evaluation was done on the basis that, for an employer to recruit with ease, each position should have at least 50 candidates. As such, the figure below illustrates in green the percentage of positions (unweighted) that it would be able to fill with ease.

**WORKFORCE SUITABILITY PER REGION FOR THE DAIRY PRODUCT MANUFACTURING SECTOR**



Source: CAI Global using JobsEQ 2018Q1 data

Note: Occupation employment and unemployment are place-of-residence data--that is, referring to workers who reside in the named locality.

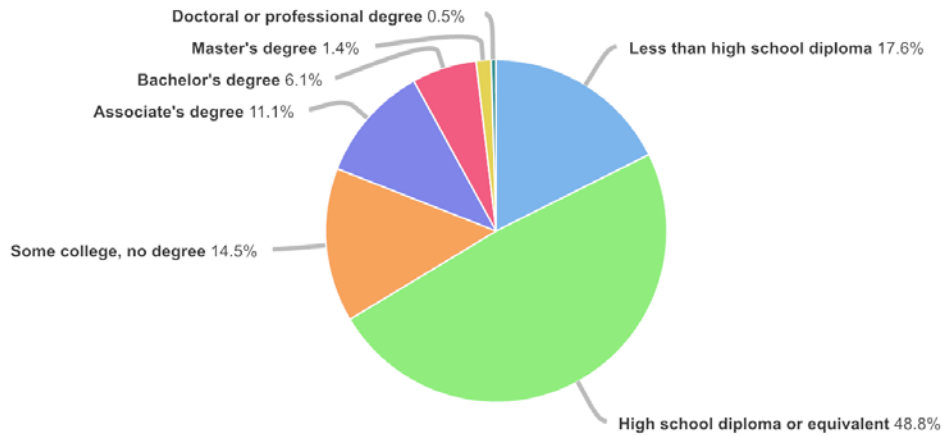
For a dairy product manufacturer looking to expand or open a new facility of 50 people, the Chateaugay area would provide the best workforce suitability, however 8 out of the 31 positions would be difficult to recruit. Malone and Bombay rank 2<sup>nd</sup> with the exact same ratios of candidates to job openings. Saranac Lake and Tupper Lake rank 3<sup>rd</sup> and 4<sup>th</sup> in terms of suitability for that type of investment project.

The chart below represents the average educational attainment makeup of the occupations that a new 50 people facility in the dairy product manufacturing industry would require:



## Education Breakdown for What-If Analysis

Franklin County, New York, NAICS 3115 - Dairy Product Manufacturing



Source: CAI Analytics using JobsEQ 2018Q2 data

### Value of the Food Manufacturing Industry

The total purchases made by the region's food manufacturing industry amount to \$82,236,000 with 34% of these purchases made locally, in Franklin County. The good news is that the top 3 supplier industries are 100% local. Below are the top 10 supplying industries:

66

Buyer Industry: Food Manufacturing (311) in Franklin County, New York					
NAICS	Supplier Industries	Purchases from US Firms	Purchases from In-Region Firms	Purchases from Out-of-Region Firms	% In-Region Purchases
311513	Cheese Manufacturing	\$11,462,000	\$11,440,000	\$22,000	100%
112000	Animal Production (Proprietors)	\$6,988,000	\$6,962,000	\$26,000	100%
112120	Dairy Cattle and Milk Production	\$5,966,000	\$5,964,000	\$2,000	100%
311119	Other Animal Food Manufacturing	\$3,262,000	\$1,543,000	\$1,719,000	47%
311511	Fluid Milk Manufacturing	\$2,668,000	\$0	\$2,668,000	0%
324110	Petroleum Refineries	\$2,027,000	\$0	\$2,027,000	0%
425120	Wholesale Trade Agents and Brokers	\$1,909,000	\$60,000	\$1,849,000	3%
484121	General Freight Trucking, Long-Distance, Truckload	\$1,690,000	\$79,000	\$1,611,000	5%
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	\$1,557,000	\$0	\$1,557,000	0%
551114	Corporate, Subsidiary, and Regional Managing Offices	\$1,202,000	\$181,000	\$1,021,000	15%

Source: [JobsEQ@](#)



Suppliers from the industries highlighted in yellow would be interesting to attract to the region for three reasons:

1. They represent an important portion of the purchases made by the food manufacturing industry
2. Most of these purchases are made outside of the region
3. They are directly linked to the analyzed industry

On the other hand, the total in-region purchases value of the food manufacturing industry is \$18,536,000, which represents the amount of purchases local industries make from the local food manufacturing industry or, in other words, the local demand. The main buyer industry is Cheese Manufacturing (NAICS 311513) at \$12,953,000.

The Gross Regional Product (GRP) of the food manufacturing industry is \$20,565,865, which represents the final market value of all goods and services produced by the industry in the region, including the earnings, property income, and taxes on production.

### The Environmental Science and Biotechnology Sector

The Camoin CEDS noted the importance of the Environmental Science and Biotechnology sector for the potential to grow the cluster within the region and capitalize on the existing local and regional assets. The assets named include science exploration and education (Paul Smith’s, The Wild Center, the Adirondack Public Observatory, and the Trudeau Institute). During the CAI Global team’s visit to Franklin County, the team met with representatives of the Trudeau Institute and of two local companies in the biotechnology sector, Ampersand Biosciences and Bionique. Although transportation for people and products could be improved, the clean environment and collaboration opportunities make Franklin County an interesting location for companies in the environmental science and biotechnology.

The Trudeau Institute and Clarkson University are working on immuno-engineering and there is collaboration between Paul Smith’s and Trudeau Institute on Lyme disease research.

### Workforce Availability for a Company in Research and Development in the Physical, Engineering, and Life Sciences (NAICS 54171)

The average company in Research and Development in the Physical, Engineering, and Life Sciences looking to open up a facility of 50 people in Franklin County would require the following workforce:

SOC	POSITION TITLE	NEW EMPLOYER DEMAND
11-1021	General and Operations Managers	1
11-2021	Marketing Managers	1
11-3021	Computer and Information Systems Managers	1
11-3031	Financial Managers	1
11-9041	Architectural and Engineering Managers	1
11-9121	Natural Sciences Managers	2
11-9199	Managers, All Other	1
13-1023	Purchasing Agents, Except Wholesale, Retail, and Farm Products	1
13-1041	Compliance Officers	1



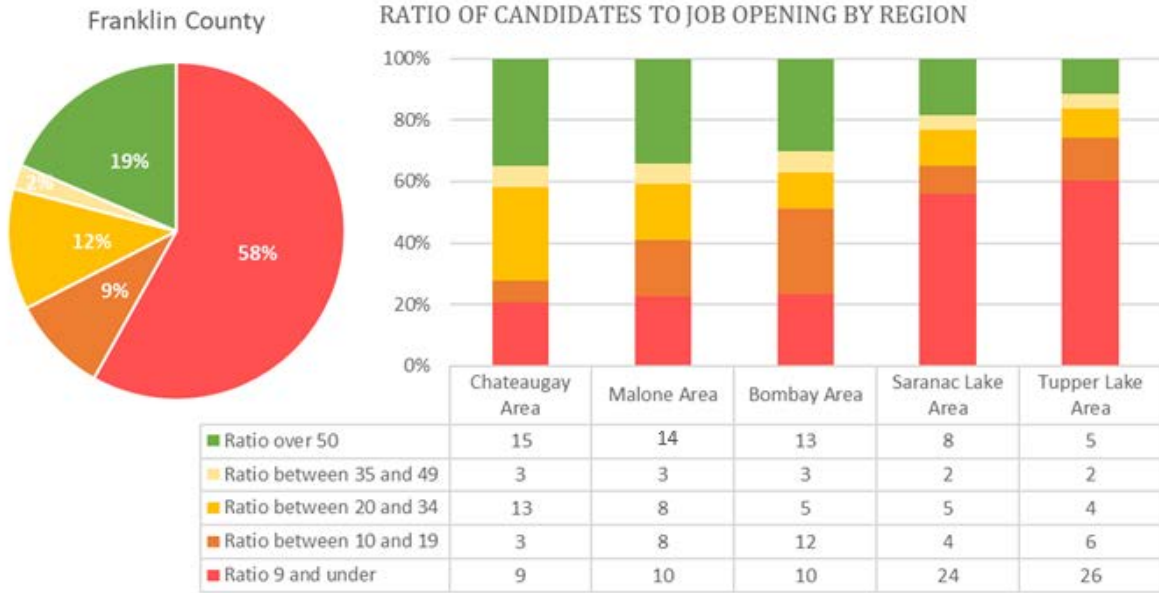
<b>13-1071</b>	Human Resources Specialists	1
<b>13-1111</b>	Management Analysts	1
<b>13-1161</b>	Market Research Analysts and Marketing Specialists	1
<b>13-1199</b>	Business Operations Specialists, All Other	1
<b>13-2011</b>	Accountants and Auditors	1
<b>15-1111</b>	Computer and Information Research Scientists	1
<b>15-1121</b>	Computer Systems Analysts	1
<b>15-1132</b>	Software Developers, Applications	1
<b>15-1133</b>	Software Developers, Systems Software	2
<b>15-1142</b>	Network and Computer Systems Administrators	1
<b>15-2041</b>	Statisticians	1
<b>17-2011</b>	Aerospace Engineers	1
<b>17-2061</b>	Computer Hardware Engineers	1
<b>17-2071</b>	Electrical Engineers	1
<b>17-2072</b>	Electronics Engineers, Except Computer	1
<b>17-2112</b>	Industrial Engineers	1
<b>17-2141</b>	Mechanical Engineers	2
<b>17-2199</b>	Engineers, All Other	1
<b>17-3023</b>	Electrical and Electronic Engineering Technicians	1
<b>17-3029</b>	Engineering Technicians, Except Drafters, All Other	1
<b>19-1021</b>	Biochemists and Biophysicists	1
<b>19-1022</b>	Microbiologists	1
<b>19-1029</b>	Biological Scientists, All Other	1
<b>19-1042</b>	Medical Scientists, Except Epidemiologists	4
<b>19-2012</b>	Physicists	1
<b>19-2031</b>	Chemists	1
<b>19-4021</b>	Biological Technicians	2
<b>19-4031</b>	Chemical Technicians	1
<b>19-4099</b>	Life, Physical, and Social Science Technicians, All Other	1
<b>29-2012</b>	Medical and Clinical Laboratory Technicians	1
<b>41-4011</b>	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	1
<b>43-6011</b>	Executive Secretaries and Executive Administrative Assistants	1
<b>43-6014</b>	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1
<b>43-9061</b>	Office Clerks, General	1
	<b>Total</b>	<b>50</b>

Source: [JobsEQ®](#)

In order to evaluate the suitability of Franklin County to accommodate such an expansion/project, CAI analyzed the workforce availability in Franklin County, and within a 45-minute drive of each of its five regions with industrial parks or sites. The evaluation was done on the basis that, for an employer to recruit with ease, each position should have at least 50 candidates. As such, the figure below illustrates in green the percentage of positions (unweighted) that it would be able to fill with ease.



**WORKFORCE SUITABILITY PER REGION FOR THE RESEARCH AND DEVELOPMENT IN THE PHYSICAL, ENGINEERING, AND LIFE SCIENCES SECTOR**



Source: CAI Analytics using JobsEQ 2018Q1 data

Note: Occupation employment and unemployment are place-of-residence data--that is, referring to workers who reside in the named locality.

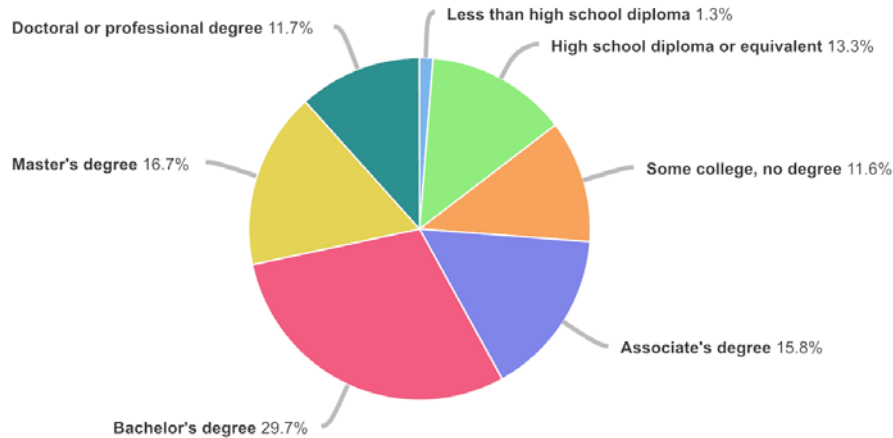
For a company in Research and Development in the Physical, Engineering, and Life Sciences looking to expand or open a new facility of 50 people, Chateaugay would provide the best workforce suitability however 28 out of the 43 positions would be difficult to recruit. Malone, Bombay, Saranac Lake and Tupper Lake rank 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> in terms of suitability for that type of investment project.

The chart below represents the average educational attainment makeup of the occupations that a new 50 people facility in the research and development in the Physical, Engineering, and Life Sciences industry would require:



## Education Breakdown for What-If Analysis

Franklin County, New York, NAICS 54171 - Research and Development in the Physical, Engineering, and Life Sciences



Source: CAI Analytics using JobsEQ 2018Q2 data

\* Note that the same analysis was performed for the Research and Development in Biotechnology (except Nanobiotechnology) (NAICS 541714) industry and the results were exactly the same as for the Research and Development in the Physical, Engineering, and Life Sciences (NAICS 54171) industry.

### Value of the R&D in the Physical, Engineering, and Life Sciences Industry

The total purchases made by the region's R&D in the Physical, Engineering, and Life Sciences industry amount to \$8,028,000 with 11% of these purchases made locally in Franklin County. Below are the top 10 supplying industries:

Buyer Industry: Research and Development in the Physical, Engineering, and Life Sciences (54171) in Franklin County, New York					
NAICS	Supplier Industries	Purchases from US Firms	Purchases from In-Region Firms	Purchases from Out-of-Region Firms	% In-Region Purchases
541110	Offices of Lawyers	\$725,000	\$99,000	\$626,000	14%
531311	Residential Property Managers	\$504,000	\$63,000	\$441,000	13%
531210	Offices of Real Estate Agents and Brokers	\$435,000	\$72,000	\$363,000	17%
541611	Administrative Management and General Management Consulting Services	\$357,000	\$40,000	\$317,000	11%
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	\$334,000	\$4,000	\$330,000	1%
541330	Engineering Services	\$296,000	\$13,000	\$283,000	4%

522110	Commercial Banking	\$230,000	\$36,000	\$194,000	16%
531312	Nonresidential Property Managers	\$217,000	\$33,000	\$184,000	15%
531120	Lessors of Nonresidential Buildings (except Mini warehouses)	\$185,000	\$8,000	\$177,000	4%
551114	Corporate, Subsidiary, and Regional Managing Offices	\$174,000	\$20,000	\$154,000	11%

Source: [JobsEQ@](#)

**Suppliers from the industries highlighted in yellow would be interesting to attract in the region for three reasons:**

- 1. They represent an important portion of the purchases made by the R&D in the Physical, Engineering, and Life Sciences industry**
- 2. Most of these purchases are made outside of the region**
- 3. They are directly linked to the analyzed industry**

On the other hand, the total in-region purchases value of the R&D in the Physical, Engineering, and Life Sciences industry is \$152,000, which represents the amount of purchases local industries make from the local R&D in this industry or, in other words, the local demand. The main buyer industry is Research and Development in Biotechnology (except Nanobiotechnology) (NAICS 541714) at \$110,000.

The Gross Regional Product (GRP) of the R&D in the Physical, Engineering, and Life Sciences industry is \$4,624,028, which represents the final market value of all goods and services produced by the industry in the region, including the earnings, property income, and taxes on production.

71

## The Forestry and Wood Products Sector

The Camoin document of 2014 identified the Forestry and Wood Products as a legacy sector that should be supported but identified that growth within that sector would be challenging. The report mentioned the increased competition stemming from foreign imports and alternative products, increasing costs of equipment, lack of processing facilities, and an aging workforce. Despite these weaknesses, Camoin argues that the Forestry and Wood Products Cluster continues to be an important economic driver for Franklin County and that opportunities exist for growth in this industry. Examples provided included furniture manufacturing, biofuel production, maple production and wood pellet production.

The Forestry industry fits into NAICS sector 11, Agriculture, Forestry, Fishing and Hunting, as described above.

### Workforce Availability for a Company in Forestry and Logging (NAICS 113)

The average company in Forestry and Logging looking to open up a facility of 50 people in Franklin County would require the following workforce:

SOC	POSITION TITLE	NEW EMPLOYER DEMAND
11-1021	General and Operations Managers	1
11-9199	Managers, All Other	1





<b>19-1032</b>	Foresters	1
<b>37-3013</b>	Tree Trimmers and Pruners	1
<b>37-3019</b>	Grounds Maintenance Workers, All Other	1
<b>43-3031</b>	Bookkeeping, Accounting, and Auditing Clerks	1
<b>43-6014</b>	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	2
<b>43-9061</b>	Office Clerks, General	1
<b>45-1011</b>	First-Line Supervisors of Farming, Fishing, and Forestry Workers	3
<b>45-4011</b>	Forest and Conservation Workers	1
<b>45-4021</b>	Fallers	4
<b>45-4022</b>	Logging Equipment Operators	20
<b>45-4029</b>	Logging Workers, All Other	2
<b>49-3042</b>	Mobile Heavy Equipment Mechanics, Except Engines	1
<b>49-9071</b>	Maintenance and Repair Workers, General	1
<b>51-7041</b>	Sawing Machine Setters, Operators, and Tenders, Wood	1
<b>53-3032</b>	Heavy and Tractor-Trailer Truck Drivers	7
<b>53-7062</b>	Laborers and Freight, Stock, and Material Movers, Hand	1
<b>Total</b>		<b>50</b>

Source: [JobsEQ@](#)

In order to evaluate the suitability of Franklin County to accommodate such a project, CAI looked at the workforce availability in Franklin County, and within a 45-minute drive of each of its five regions with industrial parks or sites. The evaluation was done on the same basis as previous ones; that, for an employer to recruit with ease, each position should have at least 50 candidates. As such, the figure below illustrates in green the percentage of positions (unweighted) that it would be able to fill with ease.

### WORKFORCE SUITABILITY PER REGION FOR THE FORESTRY AND LOGGING SECTOR



Source: CAI Analytics using JobsEQ 2018Q1 data



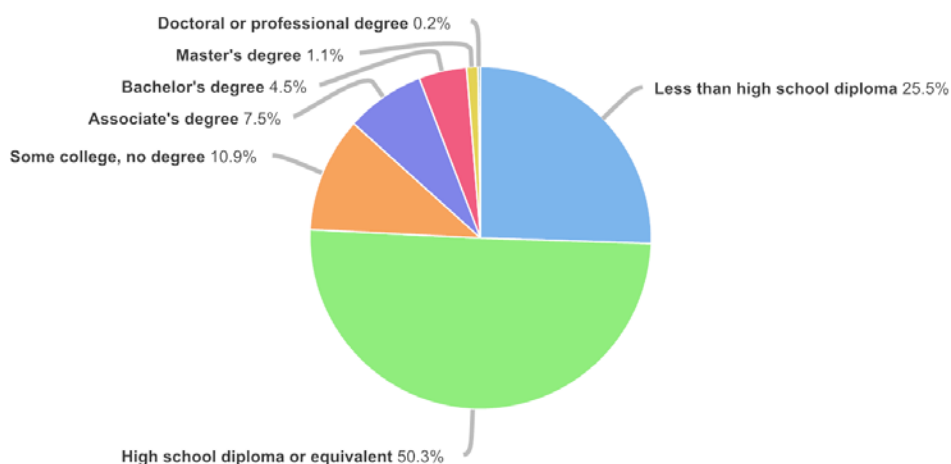
Note: Occupation employment and unemployment are place-of-residence data--that is, referring to workers who reside in the named locality.

For a company in Forestry and Logging looking to expand or open a new facility of 50 people, the Chateaugay area would once again provide the best workforce suitability, however 10 out of the 18 positions would be difficult to recruit. Malone, Bombay, Saranac Lake and Tupper Lake rank 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> in terms of suitability for that type of investment project.

The chart below represents the average educational attainment makeup of the occupations that a new 50 people facility in the Forestry and Logging industry would require:

### Education Breakdown for What-If Analysis

Franklin County, New York, NAICS 113 - Forestry and Logging



Source: CAI Analytics using JobsEQ 2018Q2 data

### Value of the Forestry and Logging industry

The total purchases made by the region's Forestry and Logging industry amount to \$4,941,000 with 10% of these purchases made locally, in Franklin County. Below are the top 10 supplying industries:

Buyer Industry: Forestry and Logging (113) in Franklin County, New York					
NAICS	Supplier Industries	Purchases from US Firms	Purchases from In-Region Firms	Purchases from Out-of-Region Firms	% In-Region Purchases
115115	Farm Labor Contractors and Crew Leaders	\$913,000	\$0	\$913,000	0%
115114	Postharvest Crop Activities (except Cotton Ginning)	\$446,000	\$0	\$446,000	0%
113310	Logging	\$212,000	\$212,000	\$0	100%
324110	Petroleum Refineries	\$201,000	\$0	\$201,000	0%
115210	Support Activities for Animal Production	\$147,000	\$44,000	\$103,000	30%
115112	Soil Preparation, Planting, and Cultivating	\$138,000	\$30,000	\$108,000	22%

333111	Farm Machinery and Equipment Manufacturing	\$129,000	\$0	\$129,000	0%
113110	Timber Tract Operations	\$107,000	\$49,000	\$58,000	46%
425120	Wholesale Trade Agents and Brokers	\$101,000	\$3,000	\$98,000	3%
115116	Farm Management Services	\$97,000	\$10,000	\$87,000	10%

Source: [JobsEQ@](#)

**Suppliers from the industries highlighted in yellow would be interesting to attract in the region for three reasons:**

- 1. They represent an important portion of the purchases made by the Forestry and Logging industry**
- 2. Most of these purchases are made outside of the region**
- 3. They are directly linked to the analyzed industry**

On the other hand, the total in-region purchases value of the Forestry and Logging industry is \$934,000, which represents the amount of purchases local industries make from the local Forestry and Logging industry or, in other words, the local demand. The main buyer industry is Sawmills (NAICS 32113) at \$399,000.

The Gross Regional Product (GRP) of the Forestry and Logging industry is \$13,888,381, which represents the final market value of all goods and services produced by the industry in the region, including the earnings, property income, and taxes on production.

## **The Health Care and Wellness Sector**

The Health Care and Wellness Sector was deemed extremely relevant to Franklin County as it is one of the largest employers of the region. Furthermore, the industry is expected to grow due to a number of factors including, but not limited to, the aging population and the implementation of new technologies and processes.

Although the industry is the largest employer of the region, finding qualified workers is nonetheless the cluster's main challenge. During CAI's discussions with local representatives, it was made evident that Franklin County has excellent nursing programs, however issues arise when comes time for these trained nurses to get working experience in local hospitals and clinics as there simply is not enough spots for all students.

This pool of nursing graduates is a strength for Franklin County and the following analysis aims at ensuring that it properly serves the development of a health care and wellness cluster and of the region's general economy.

### **Workforce Availability for a Company in Health Care and Social Assistance (NAICS 62)**

The average company in Health Care and Social Assistance looking to open up a facility of 50 people in Franklin County would require the following workforce:



<b>SOC</b>	<b>POSITION TITLE</b>	<b>NEW EMPLOYER DEMAND</b>
<b>11-9111</b>	Medical and Health Services Managers	1
<b>21-1014</b>	Mental Health Counselors	1
<b>21-1021</b>	Child, Family, and School Social Workers	1
<b>21-1022</b>	Healthcare Social Workers	1
<b>21-1093</b>	Social and Human Service Assistants	1
<b>25-2011</b>	Preschool Teachers, Except Special Education	1
<b>25-9041</b>	Teacher Assistants	1
<b>29-1069</b>	Physicians and Surgeons, All Other	1
<b>29-1123</b>	Physical Therapists	1
<b>29-1141</b>	Registered Nurses	6
<b>29-1171</b>	Nurse Practitioners	1
<b>29-2011</b>	Medical and Clinical Laboratory Technologists	1
<b>29-2012</b>	Medical and Clinical Laboratory Technicians	1
<b>29-2021</b>	Dental Hygienists	1
<b>29-2034</b>	Radiologic Technologists	1
<b>29-2041</b>	Emergency Medical Technicians and Paramedics	1
<b>29-2061</b>	Licensed Practical and Licensed Vocational Nurses	2
<b>29-2071</b>	Medical Records and Health Information Technicians	1
<b>31-1011</b>	Home Health Aides	2
<b>31-1014</b>	Nursing Assistants	3
<b>31-9091</b>	Dental Assistants	1
<b>31-9092</b>	Medical Assistants	2
<b>35-2012</b>	Cooks, Institution and Cafeteria	1
<b>35-3041</b>	Food Servers, Non restaurant	1
<b>37-2011</b>	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1
<b>37-2012</b>	Maids and Housekeeping Cleaners	1
<b>39-9011</b>	Childcare Workers	2
<b>39-9021</b>	Personal Care Aides	5
<b>43-1011</b>	First-Line Supervisors of Office and Administrative Support Workers	1
<b>43-3021</b>	Billing and Posting Clerks	1
<b>43-4051</b>	Customer Service Representatives	1
<b>43-4171</b>	Receptionists and Information Clerks	1
<b>43-6013</b>	Medical Secretaries	1
<b>43-6014</b>	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1
<b>43-9061</b>	Office Clerks, General	1
<b>Total</b>		<b>50</b>

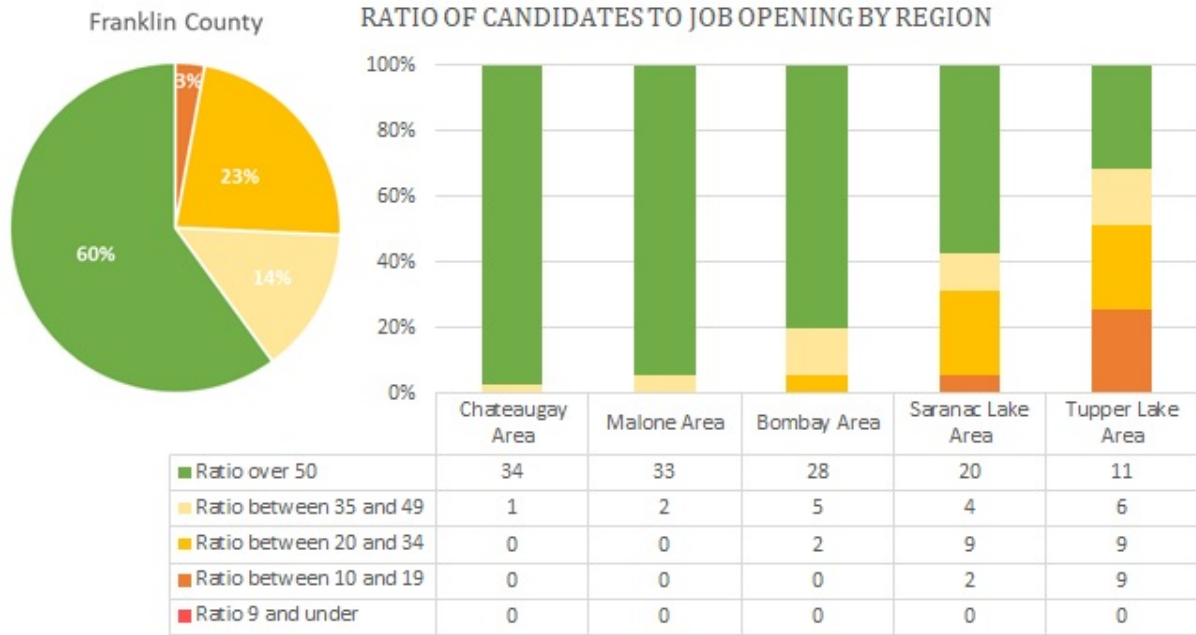
Source: [JobsEQ®](#)

In order to evaluate the suitability of Franklin County to accommodate such an expansion/project, CAI looked at the workforce availability in Franklin County, and within a 45-minute drive of each of its five regions with industrial parks or sites. The evaluation was done with the same basis that, for an employer to recruit with ease, each position should have at least 50 candidates. As such,



the figure below illustrates in green the percentage of positions (unweighted) that it would be able to fill with ease.

**WORKFORCE SUITABILITY PER REGION FOR THE HEALTH CARE AND SOCIAL ASSISTANCE SECTOR**



Source: CAI Analytics using JobsEQ 2018Q1 data

Note: Occupation employment and unemployment are place-of-residence data--that is, referring to workers who reside in the named locality.

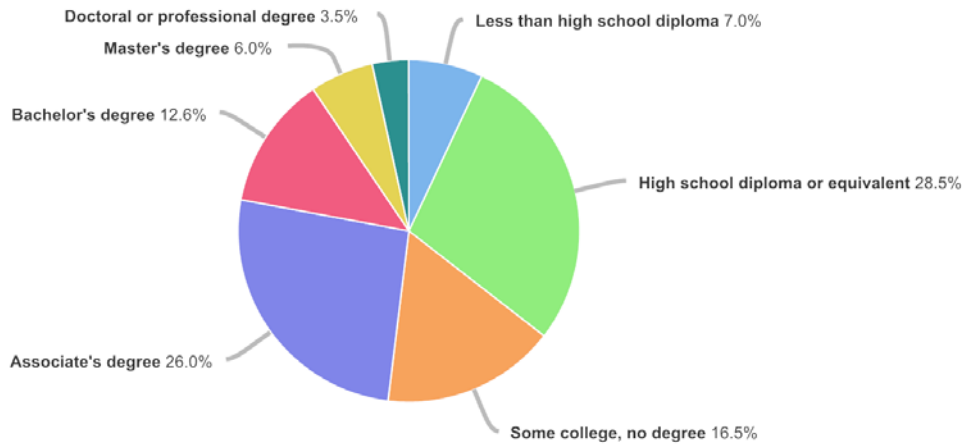
For a company in health care and social assistance looking to expand or open a new facility of 50 people, the Chateaugay area would provide the best workforce suitability with only 1 out of the 35 positions that would be difficult to recruit. Malone, Bombay, Saranac Lake and Tupper Lake rank 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> in terms of suitability for that type of investment project.

The chart below represents the average educational attainment makeup of the occupations that a new 50 people facility in the health care and wellness industry would require:



## Education Breakdown for What-If Analysis

Franklin County, New York, NAICS 62 - Health Care and Social Assistance



Source: CAI Analytics using JobsEQ 2018Q2 data

### Value of the Health Care and Social Assistance Industry

The total purchases made by the region's health care and social assistance industry amount to \$277,956,000 with 11% of these purchases made locally, in Franklin County. Below are the top 10 supplying industries:

77

Buyer Industry: Health Care and Social Assistance (62) in Franklin County, New York					
NAICS	Supplier Industries	Purchases from US Firms	Purchases from In-Region Firms	Purchases from Out-of-Region Firms	% In-Region Purchases
531311	Residential Property Managers	\$16,494,000	\$2,385,000	\$14,109,000	14%
531210	Offices of Real Estate Agents and Brokers	\$14,246,000	\$2,762,000	\$11,484,000	19%
524126	Direct Property and Casualty Insurance Carriers	\$8,408,000	\$1,314,000	\$7,094,000	16%
551114	Corporate, Subsidiary, and Regional Managing Offices	\$7,231,000	\$1,078,000	\$6,153,000	15%
531312	Nonresidential Property Managers	\$7,114,000	\$1,272,000	\$5,842,000	18%
541110	Offices of Lawyers	\$6,483,000	\$926,000	\$5,557,000	14%
524114	Direct Health and Medical Insurance Carriers	\$6,452,000	\$0	\$6,452,000	0%
531120	Lessors of Nonresidential Buildings (except Mini warehouses)	\$6,061,000	\$241,000	\$5,820,000	4%
561320	Temporary Help Services	\$5,692,000	\$1,214,000	\$4,478,000	21%
517311	Wired Telecommunications Carriers	\$5,194,000	\$1,036,000	\$4,158,000	20%

Source: [JobsEQ](#)



On the other hand, the total in-region purchases value of the health care and social assistance industry is \$2,362,000, which represents the amount of purchases local industries make from the local health care and social assistance industry or, in other words, the local demand. The main buyer industry is General Medical and Surgical Hospitals (NAICS 622110) at \$1,169,000.

The Gross Regional Product (GRP) of the Health Care and Social Assistance industry is \$256,481,096, which represents the final market value of all goods and services produced by the industry in the region, including the earnings, property income, and taxes on production.

## The Tourism, Culture and Recreation Sector

Franklin County is blessed with a natural environment that provides a wide variety of activities year-round for locals and tourists alike who enjoy the outdoors. Local tourism destinations such as the Adirondacks bring visitors who spend money in the region, thus supporting local businesses such as lodging facilities, restaurants, and more. Locals have many ideas to develop the Tourism, Culture and Recreation cluster, including an ecotourism lodge, a multi-day hiking trail with various lodging facilities, and more.

The main challenge of the Tourism, Culture and Recreation cluster is the fact that the jobs required to maintain it are low-wage and seasonal.

### Workforce Availability for a Company in Arts, Entertainment, and Recreation (NAICS 71)

The average company in Arts, Entertainment, and Recreation looking to open up a facility of 50 people in Franklin County would require the following workforce:

SOC	POSITION TITLE	NEW EMPLOYER DEMAND
<b>11-1021</b>	General and Operations Managers	1
<b>25-3021</b>	Self-Enrichment Education Teachers	1
<b>27-1013</b>	Fine Artists, Including Painters, Sculptors, and Illustrators	1
<b>27-1014</b>	Multimedia Artists and Animators	1
<b>27-2011</b>	Actors	1
<b>27-2012</b>	Producers and Directors	1
<b>27-2022</b>	Coaches and Scouts	1
<b>27-2042</b>	Musicians and Singers	1
<b>27-3043</b>	Writers and Authors	2
<b>33-9032</b>	Security Guards	1
<b>33-9092</b>	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	1
<b>35-2014</b>	Cooks, Restaurant	1
<b>35-3011</b>	Bartenders	1
<b>35-3021</b>	Combined Food Preparation and Serving Workers, Including Fast Food	1
<b>35-3022</b>	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1
<b>35-3031</b>	Waiters and Waitresses	2
<b>35-9011</b>	Dining Room and Cafeteria Attendants and Bartender Helpers	1
<b>35-9021</b>	Dishwashers	1
<b>37-2011</b>	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1
<b>37-3011</b>	Landscaping and Grounds-keeping Workers	2



<b>39-1011</b>	Gaming Supervisors	1
<b>39-1021</b>	First-Line Supervisors of Personal Service Workers	1
<b>39-2021</b>	Nonfarm Animal Caretakers	1
<b>39-3011</b>	Gaming Dealers	1
<b>39-3031</b>	Ushers, Lobby Attendants, and Ticket Takers	1
<b>39-3091</b>	Amusement and Recreation Attendants	4
<b>39-7011</b>	Tour Guides and Escorts	1
<b>39-9011</b>	Childcare Workers	1
<b>39-9031</b>	Fitness Trainers and Aerobics Instructors	4
<b>39-9032</b>	Recreation Workers	1
<b>41-2011</b>	Cashiers	1
<b>41-2021</b>	Counter and Rental Clerks	1
<b>41-2031</b>	Retail Salespersons	1
<b>41-3099</b>	Sales Representatives, Services, All Other	1
<b>43-3031</b>	Bookkeeping, Accounting, and Auditing Clerks	1
<b>43-4051</b>	Customer Service Representatives	1
<b>43-4171</b>	Receptionists and Information Clerks	1
<b>43-6014</b>	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1
<b>43-9061</b>	Office Clerks, General	1
<b>49-9071</b>	Maintenance and Repair Workers, General	1
<b>53-7062</b>	Laborers and Freight, Stock, and Material Movers, Hand	1
<b>Total</b>		<b>50</b>

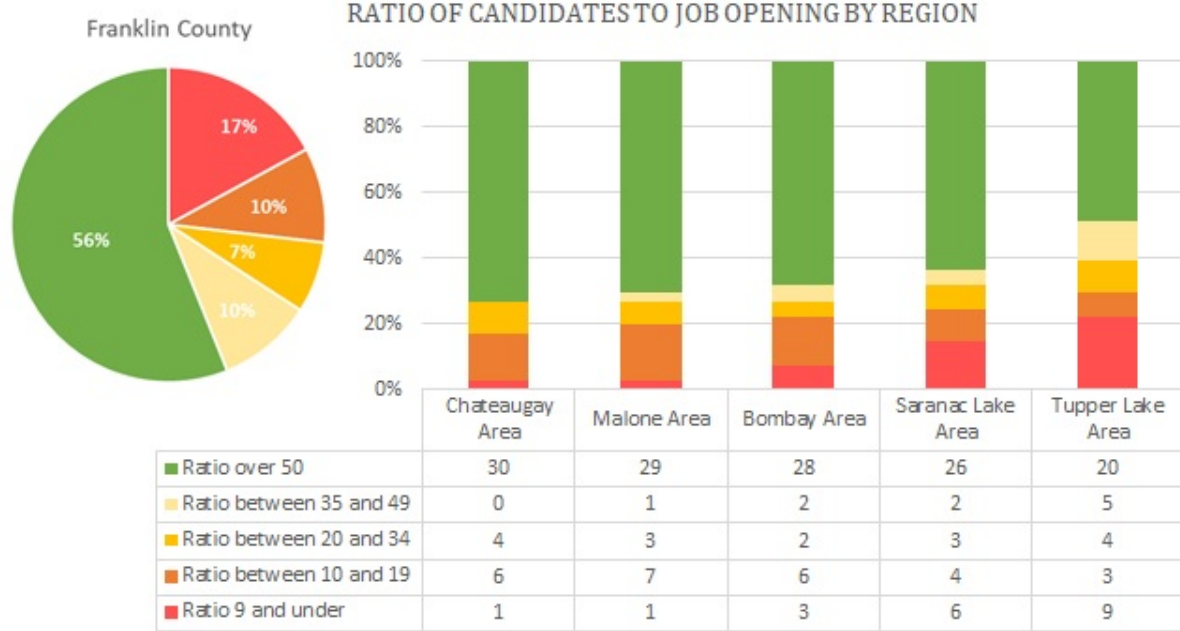
Source: [JobsEQ®](#)

In order to evaluate the suitability of Franklin County to accommodate such an expansion/project, CAI looked at the workforce availability in Franklin County, and within a 45-minute drive of each of its five regions with industrial parks or sites. The evaluation was done on the basis that, for an employer to recruit with ease, each position should have at least 50 candidates. As such, the figure below illustrated in green the percentage of position (unweighted) that it would be able to fill with ease.





## WORKFORCE SUITABILITY PER REGION FOR THE ARTS, ENTERTAINMENT, AND RECREATION



Source: CAI Analytics using JobsEQ 2018Q1 data

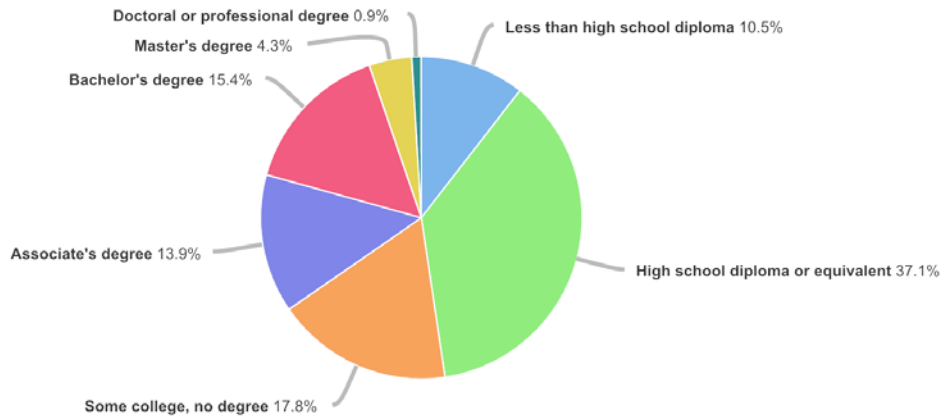
Note: Occupation employment and unemployment are place-of-residence data--that is, referring to workers who reside in the named locality.

For a company in Arts, Entertainment, and Recreation looking to expand or open a new facility of 50 people, the Chateaugay area would provide the best workforce suitability, however 11 out of the 41 positions would be difficult to recruit. Malone, Bombay, Saranac Lake and Tupper Lake rank 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> in terms of suitability for that type of investment project.

The chart below represents the average educational attainment makeup of the occupations that a new 50 people facility in the Arts, Entertainment, and Recreation industry would require:

### Education Breakdown for What-If Analysis

Franklin County, New York, NAICS 71 - Arts, Entertainment, and Recreation



Source: CAI Analytics using JobsEQ 2018Q2 data



## Value of the Arts, Entertainment, and Recreation Industry

The total purchases made by the region's Arts, Entertainment, and Recreation industry amount to \$32,848,000 with 19% of these purchases made locally, in Franklin County. Below are the top 10 supplying industries:

Buyer Industry: Arts, Entertainment, and Recreation (71) in Franklin County, New York					
NAICS	Supplier Industries	Purchases from US Firms	Purchases from In-Region Firms	Purchases from Out-of-Region Firms	% In-Region Purchases
541110	Offices of Lawyers	\$2,797,000	\$410,000	\$2,387,000	15%
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	\$1,660,000	\$1,451,000	\$209,000	87%
531311	Residential Property Managers	\$1,471,000	\$320,000	\$1,151,000	22%
531210	Offices of Real Estate Agents and Brokers	\$1,270,000	\$346,000	\$924,000	27%
551114	Corporate, Subsidiary, and Regional Managing Offices	\$790,000	\$212,000	\$578,000	27%
531312	Nonresidential Property Managers	\$634,000	\$161,000	\$473,000	25%
517311	Wired Telecommunications Carriers	\$551,000	\$169,000	\$382,000	31%
531120	Lessors of Nonresidential Buildings (except Mini warehouses)	\$540,000	\$37,000	\$503,000	7%
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities	\$515,000	\$0	\$515,000	0%
524126	Direct Property and Casualty Insurance Carriers	\$506,000	\$85,000	\$421,000	17%

Source: [JobsEQ®](#)

On the other hand, the total in-region purchases value of the Arts, Entertainment, and Recreation industry is \$3,802,000, which represents the amount of purchases local industries make from the local Arts, Entertainment, and Recreation industry or, in other words, the local demand. The main buyer industry is Independent Artists, Writers, and Performers (NAICS 711510) at \$1,552,000.

The Gross Regional Product (GRP) of the Arts, Entertainment, and Recreation industry is \$14,547,093, which represents the final market value of all goods and services produced by the industry in the region, including the earnings, property income, and taxes on production.



# COMPLEMENTARY INDUSTRIES TO DEVELOP

For a new company to invest in a region, a skilled workforce and a market are key.

Furthermore, as explained in the methodology section of this report, in terms of economic development attraction strategies, prioritizing the private sector over the public sector is a better way to implement short to medium-term strategies. Therefore, when identifying complementary industries to develop in Franklin County, CAI has given priority to industries in the private sector for which there is a skilled workforce and market available in the region.

## Complementary Industries to Attract Based on Workforce

Out of all 5-digit occupations, CAI identified the following occupations based on the following factors to create a list of the most important occupations in Franklin County:

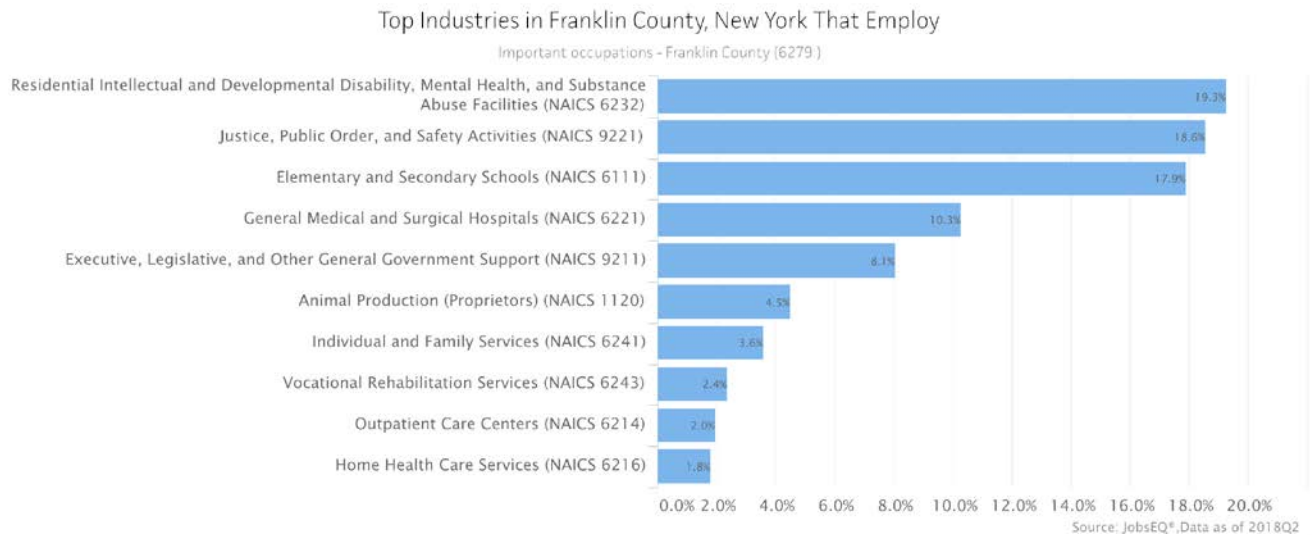
1. Location Quotient over 1.25
2. Current employment over 150

Occupation Snapshot in Franklin County, New York, 2018q2														
SOC	Title	Current						5-Year History		5-Year Forecast				
		Four Quarters Ending with 2018q2			2018q2			Total Change	Avg Ann % Chg in Empl	Total New Demand	Separations		Growth	
		Empl	Avg Ann Wages <sup>1</sup>	LQ	Unempl	Unempl Rate	Online Job Ads <sup>2</sup>				Empl2	Region	Exits	Transfers
33-3010	Bailiffs, Correctional Officers, and Jailers	1,013	\$60,300	19.59	52	5.3%	0	-45	-0.9%	302	165	213	-76	-1.5%
39-9020	Personal Care Aides	798	\$27,500	3.63	51	6.2%	2	-399	-7.8%	598	326	244	28	0.7%
31-1010	Nursing, Psychiatric, and Home Health Aides	622	\$29,700	1.95	36	5.4%	8	-100	-2.9%	369	193	161	16	0.5%
29-1140	Registered Nurses	563	\$67,700	1.52	8	1.5%	23	137	5.7%	150	82	62	5	0.2%
25-2020	Elementary and Middle School Teachers	347	\$59,300	1.43	14	4.1%	4	13	0.8%	117	57	63	-3	-0.2%
11-9010	Farmers, Ranchers, and Other Agricultural Managers	322	\$60,500	3.02	1	0.5%	0	20	1.3%	109	92	24	-6	-0.4%
21-1090	Miscellaneous Community and Social Service Specialists	303	\$42,600	3.55	15	5.3%	29	33	2.4%	180	66	107	7	0.5%
21-1010	Counselors	292	\$45,400	3.20	8	3.0%	6	30	2.2%	160	55	97	8	0.6%



25-9040	Teacher Assistants	264	\$25,600	1.72	16	5.6%	0	15	1.2%	131	72	60	-1	-0.1%
21-1020	Social Workers	247	\$50,200	2.97	7	3.2%	15	49	4.6%	136	46	81	9	0.7%
25-2030	Secondary School Teachers	232	\$61,300	1.79	9	3.9%	3	9	0.8%	76	36	42	-2	-0.2%
25-3090	Miscellaneous Teachers and Instructors	184	\$31,700	1.54	9	4.6%	0	13	1.4%	97	56	43	-1	-0.2%
47-4050	Highway Maintenance Workers	179	\$38,900	10.87	21	10.7%	0	6	0.6%	85	37	50	-2	-0.3%
53-3020	Bus Drivers	178	\$37,000	1.93	10	5.3%	5	3	0.3%	98	68	36	-5	-0.5%
33-3050	Police Officers	166	\$63,100	2.14	3	1.7%	3	3	0.3%	49	20	32	-2	-0.3%
35-3010	Bartenders	153	\$23,100	2.00	10	6.0%	2	8	1.1%	111	35	84	-8	-1.1%

The following graph shows the industries that most employ the set of previously identified important occupations in the region. Below it is the same information in table format.



**Top Industry Distribution for Important Occupations - Franklin County (6279) in Franklin County, New York**

NAICS Code	Industry Title	Current Occupation Employment	Average Annual Wages	10-Year Total Demand
6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	1,131	\$27,000	1,517
9221	Justice, Public Order, and Safety Activities	1,088	\$	716
6111	Elementary and Secondary Schools	1,050	\$51,600	857
6221	General Medical and Surgical Hospitals	602	\$68,700	385



9211	Executive, Legislative, and Other General Government Support	473	\$	375
1120	Animal Production (Proprietors)	263	\$	182
6241	Individual and Family Services	211	\$33,300	341
6243	Vocational Rehabilitation Services	139	\$31,700	125
6214	Outpatient Care Centers	115	\$31,800	145
6216	Home Health Care Services	106	\$32,100	187
6239	Other Residential Care Facilities	85	\$30,400	65
4854	School and Employee Bus Transportation	77	\$35,900	85
8134	Civic and Social Organizations	62	\$25,900	81
1121	Cattle Ranching and Farming	49	\$	29
7224	Drinking Places (Alcoholic Beverages)	45	\$25,900	59

Unsurprisingly, the majority of these industries are from the public sector, with the exception of the Animal Production (Proprietors) (NAICS 1120) and the Cattle Ranching and Farming (NAICS 1121) industries. A company in either one of these industries settling in Franklin County would have no problem finding the necessary workers for its activities. In addition, it would seamlessly integrate into the existing Agriculture and Food Processing cluster.

NAICS	Industry	Description
1120	Animal Production and Aquaculture	Industries in the Animal Production and Aquaculture subsector raise or fatten animals for the sale of animals or animal products and/or raise aquatic plants and animals in controlled or selected aquatic environments for the sale of aquatic plants, animals, or their products. The subsector includes establishments, such as ranches, farms, and feedlots, primarily engaged in keeping, grazing, breeding, or feeding animals. These animals are kept for the products they produce or for eventual sale. The animals are generally raised in various environments, from total confinement or captivity to feeding on an open range pasture.
1121	Cattle Ranching and Farming	This industry group comprises establishments primarily engaged in raising cattle, milking dairy cattle, or feeding cattle for fattening.

Since it has been established that these two industries would find their necessary workforce in Franklin County, the question is whether or not they would find a market.

The total in-region purchases value of the Animal Production (proprietors) industry is \$8,472,000, which represents the amount of purchases local industries make from the local animal production (proprietors) industry or, in other words, the local demand. The main buyer industry is Cheese Manufacturing with an in-region purchase value of \$6,904,000, or 81% of the demand. Unfortunately, the Cheese Manufacturing industry already makes 100% of its purchases



from the animal production (proprietors) industry locally, which means that the market is saturated. **Therefore, CAI would not recommend attracting companies from the Animal Production (proprietors) industry since they would have difficulty finding a market.**

The total in-region purchases value of the cattle ranching and farming industry is \$6,209,000, which represents the amount of purchases local industries make from the local cattle ranching and farming industry or, in other words, the local demand. The main buyer industry is also Cheese Manufacturing with an in-region purchase value of \$5,981,000, or 96% of the demand. Unfortunately, the Cheese Manufacturing industry already makes 97% of its purchases from the local cattle ranching and farming industry, which means that the market is saturated. As such, once again, **CAI would not recommend attracting companies from the cattle ranching and farming industry since they would have difficulty finding a market despite having the workforce.**

## Complementary Industries to Attract Based on Market

In the analysis of Camoin-identified industries, supporting supplier industries were identified based on the following criteria:

1. They represent an important portion of the purchases made by the Camoin-identified industry
2. Most of these purchases are made outside of the region
3. They are directly linked to the analyzed industry

It would therefore make sense to attract companies from these industries as they would have a readily available market to serve locally. Supporting supplier industries that met the criteria were selected from the Agriculture and Food Processing, Environmental Science and Biotechnology, and Forestry and Wood Products sectors.

Below is a list of these industries to attract:

NAICS	Industry	Description
311119	Other Animal Food Manufacturing	This U.S. industry comprises establishments primarily engaged in manufacturing animal food (except dog and cat) from ingredients, such as grains, oilseed mill products, and meat products.
311511	Fluid Milk Manufacturing	This U.S. industry comprises establishments primarily engaged in (1) manufacturing processed milk products, such as pasteurized milk or cream and sour cream and/or (2) manufacturing fluid milk dairy substitutes from soybeans and other nondairy substances.
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	This U.S. industry comprises establishments primarily engaged in manufacturing dry, condensed, and evaporated milk and dairy substitute products.
541715	Research and Development in the Physical, Engineering, and Life Sciences (except nanotechnology and Biotechnology)	This U.S. industry comprises establishments primarily engaged in conducting research and experimental development (except nanotechnology and biotechnology research and experimental development) in the physical, engineering, and life sciences, such as agriculture, electronics, environmental, biology, botany, computers, chemistry, food, fisheries, forests, geology, health, mathematics, medicine, oceanography, pharmacy, physics, veterinary and other allied subjects.



115115	Farm Labor Contractors and Crew Leaders	This U.S. industry comprises establishments primarily engaged in supplying labor for agricultural production or harvesting.
115114	Postharvest Crop Activities (except Cotton Ginning)	This U.S. industry comprises establishments primarily engaged in performing services on crops, subsequent to their harvest, with the intent of preparing them for market or further processing. These establishments provide postharvest activities, such as crop cleaning, sun drying, shelling, fumigating, curing, sorting, grading, packing, and cooling.
115210	Support Activities for Animal Production	This industry comprises establishments primarily engaged in performing support activities related to raising livestock (e.g., cattle, goats, hogs, horses, poultry, sheep). These establishments may perform one or more of the following: (1) breeding services for animals, including companion animals (e.g., cats, dogs, pet birds); (2) pedigree record services; (3) boarding horses; (4) dairy herd improvement activities; (5) livestock spraying; and (6) sheep dipping and shearing.
115112	Soil Preparation, Planting, and Cultivating	This U.S. industry comprises establishments primarily engaged in performing a soil preparation activity or crop production service, such as plowing, fertilizing, seed bed preparation, planting, cultivating, and crop protecting services.
113110	Timber Tract Operations	This industry comprises establishments primarily engaged in the operation of timber tracts for the purpose of selling standing timber.
115116	Farm Management Services	This U.S. industry comprises establishments primarily engaged in providing farm management services on a contract or fee basis usually to citrus groves, orchards, or vineyards. These establishments always provide management and may arrange or contract for the partial or the complete operations of the farm establishment(s) they manage. Operational activities may include cultivating, harvesting, and/or other specialized agricultural support activities.

Since it has been established that these ten industries would find a market in Franklin County, CAI analysed whether or not they would find the necessary local workforce. To do so, CAI used the same approach that was used to analyze the Camoin-identified industries and subsequently the region where it would be easiest for a potential investor to hire its necessary workforce. Since CAI’s tool requires a “firm size” (number of new jobs), it used 50 in all cases; therefore, the results will be approximate, but will provide a general idea of the occupations to focus on.

CAI analysed each one of the ten above listed industries to identify which jobs would be the easiest to fill and which ones would be difficult to fill. For the purpose of this report, CAI analysed the top occupations for each industry in terms of new employer demand (3 or more). The full tables of this analysis can be found in Appendix C. Below is a condensed table that includes the results for the top occupations for all ten selected industries.

SOC	Title	New Employer Demand	Potential Candidates per Opening
<b>What-If Report for Franklin County, New York, NAICS 113110 - Timber Tract Operations</b>			





37-3013	Tree Trimmers and Pruners	10	1
45-4011	Forest and Conservation Workers	9	1
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	8	1
49-9071	Maintenance and Repair Workers, General	5	46
19-4093	Forest and Conservation Technicians	3	2
19-1032	Foresters	3	1
<b>What-If Report for Franklin County, New York, NAICS 115112 - Soil Preparation, Planting, and Cultivating</b>			
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	24	2
37-3012	Pesticide Handlers, Sprayers, and Applicators, Vegetation	4	1
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	3	4
37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Grounds-keeping Workers	3	7
<b>What-If Report for Franklin County, New York, NAICS 115114 - Postharvest Crop Activities (except Cotton Ginning)</b>			
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	32	1
45-2091	Agricultural Equipment Operators	3	2
<b>What-If Report for Franklin County, New York, NAICS 115115 - Farm Labor Contractors and Crew Leaders</b>			
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	32	1
45-2091	Agricultural Equipment Operators	3	2
<b>What-If Report for Franklin County, New York, NAICS 115116 - Farm Management Services</b>			
45-2092	Farmworkers and Laborers, Crop, Nursery, and Greenhouse	28	1
<b>What-If Report for Franklin County, New York, NAICS 115210 - Support Activities for Animal Production</b>			
37-3011	Landscaping and Grounds-keeping Workers	14	13
45-2093	Farmworkers, Farm, Ranch, and Aqua-cultural Animals	13	10
39-2011	Animal Trainers	9	1
39-2021	Nonfarm Animal Caretakers	3	10
<b>What-If Report for Franklin County, New York, NAICS 311119 - Other Animal Food Manufacturing</b>			
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	6	2
51-9111	Packaging and Filling Machine Operators and Tenders	5	10
53-3032	Heavy and Tractor-Trailer Truck Drivers	3	46
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	3	59
<b>What-If Report for Franklin County, New York, NAICS 311511 - Fluid Milk Manufacturing</b>			





51-3092	Food Batchmakers	7	3
51-9111	Packaging and Filling Machine Operators and Tenders	6	8
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	3	59
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	3	4
<b>What-If Report for Franklin County, New York, NAICS 311514 - Dry, Condensed, and Evaporated Dairy Product Manufacturing</b>			
51-3092	Food Batchmakers	7	3
51-9111	Packaging and Filling Machine Operators and Tenders	6	8
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	3	59
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	3	4
<b>What-If Report for Franklin County, New York, NAICS 541715 - Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)</b>			
19-1042	Medical Scientists, Except Epidemiologists	4	3

The table above shows a generally negative picture of the local availability of the necessary workforce for key supplier industries of currently implanted industries in Franklin County. However, what the analysis also shows is that the average educational attainment makeup of the occupations required for these industries is largely comprised of “Less than high school diplomas” and “High school diploma or equivalent”; see the table below:

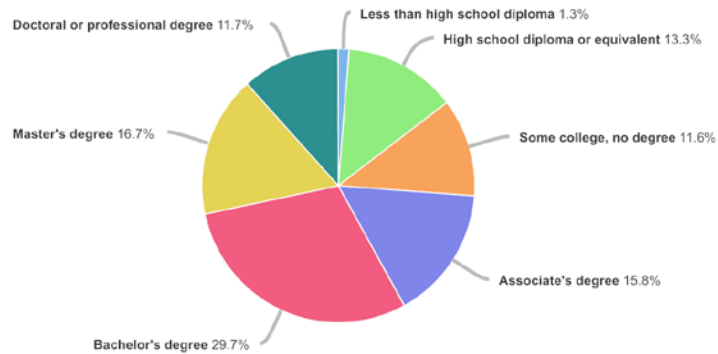
NAICS	Industry	Less than high school diploma	High school diploma or equivalent
113110	Timber Tract Operations	23.8%	37.5%
115112	Soil Preparation, Planting, and Cultivating	41.6%	36.9%
115114	Postharvest Crop Activities (except Cotton Ginning)	46.4%	36.3%
115115	Farm Labor Contractors and Crew Leaders	46.3%	36.4%
115116	Farm Management Services	42.9%	37.2%
115210	Support Activities for Animal Production	29.4%	37.2%
311119	Other Animal Food Manufacturing	15.9%	48.5%
311511	Fluid Milk Manufacturing	17.9%	49.9%
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	17.6%	48.8%
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	1.3%	13.3%

The total percentage of occupations requiring a high school diploma (or equivalent) or less is over 60% for all of these industries, with the exception of the Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) industry, for which the education breakdown is as follows:



## Education Breakdown for What-If Analysis

Franklin County, New York, NAICS 541715 - Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)



Therefore, although companies from the Research and Development in the Physical, Engineering, and Life Sciences (except nanotechnology and biotechnology) industry would have no problem finding a market, they would have difficulty hiring locally. However, an interesting point to note is that this industry was selected as a key supporting supplier for itself. **The buyer industry table from the previous section shows that the Research and Development in the Physical, Engineering, and Life Sciences (NAICS 54171) industry in Franklin County buys \$334,000 worth from the Research and Development in the Physical, Engineering, and Life Sciences (except nanotechnology and biotechnology) (NAICS 541715) industry.**

**Although not part of this current mandate, CAI would recommend that Franklin county one day conduct an industrial synergy study to find out which types of companies the local industry buys from specifically, as these suppliers will become interesting companies to attract to the region to strengthen the R&D and Biotechnology cluster.**

As for the other supporting supplier industries such as Timber Tract Operations and Fluid Milk Manufacturing, the fact that the large majority of the required workforce does not need to be skilled or educated implies that the solution does not lie in the creation of educational and/or training programs. Indeed, this type of workforce can be trained by the hiring company in a short amount of time and with limited resources. Therefore, Franklin County's pool of unemployed workers, which represented 6.7% of the local population as of December 2017, becomes a valuable asset in attracting these industries. The focus in terms of a communication strategy would be to first educate, promote and attract the local unemployed towards the types of occupations identified and secondly, to communicate with potential investors within these industries so they are aware that Franklin County has a pool of workers that is motivated and ready to work.

## Complementary Industries to Attract – Final Selection

The final selection of industries to attract responds to the following criteria:

1. Is a supporting supplier industry to one of the Camoin-identified industries
2. Has a readily available market in Franklin County
3. Will be able to hire workers in Franklin County



The final selection of industries to attract are supporting supplier industries of the Agriculture and Food Processing and the Forestry and Wood Products industries which were identified by Camoin in 2015 as being some of the main clusters in Franklin County.

Below is a brief profile of the industries that made up the final selection.

## **Timber Services**

Includes:

- Timber Tract Operations

According to IBIS World, “the Timber Services industry manages tracts of timberland and sells standing timber to downstream wood, paper and pulp product manufacturing industries.” The industry’s main end-customer is the residential construction sector, therefore the recent growth in the US housing market has been beneficial to timber services. On the other hand, the markets of import-heavy wood product manufacturing and paper manufacturing have suffered from technological change. However, the negative effect of this on the timber services industry was offset by the thriving housing market.

In order to be successful, a business in the timber services industry needs the following:

- Proximity to transport to move around timber tract areas
- Appropriate physical growing conditions to ensure healthy timber tracts
- Ability to accommodate environmental requirements, mainly due to the heavily regulated nature of the industry
- Appropriate climatic conditions to get the maximum amount of time during which outdoor maintenance can be done
- Proximity to key markets to lower transportation costs

Franklin County’s natural environment is an advantage when it comes to the timber services industry’s needs for appropriate physical growing conditions, for the ability to accommodate environmental requirements, and for appropriate climatic conditions.

## **Crop Services**

Includes:

- Soil Preparation, Planting, and Cultivating
- Postharvest Crop Activities (except Cotton Ginning)
- Farm Labor Contractors and Crew Leaders
- Farm Management Services

According to IBIS World, “the Crop Services industry consists of companies that assist in a variety of planting, harvesting and treatment activities for crop producers. The industry provides services for all types of crops, including handpicking fruit, crop dusting and cotton ginning.”

Farmers, the main client base of the crop services industry, will typically outsource activities that they cannot do efficiently themselves, either because they do not have the necessary labor or the necessary material resources. Once it has been established that the task cannot be done efficiently in-house, the outsourcing decision will be based on cost. Finally, demand is seasonal, with peaks during planting and harvesting periods.



In order to be successful, a business in the crop services industry needs the following:

- Having a good reputation as referrals is often the main source of new business for companies in this industry
- Superior financial management and debt management
- Provision of superior after-sales service to maintain a loyal clientele
- Access to the latest available and most efficient technology and techniques, which will be the main reason why farms hire crop services companies in the first place
- Production of premium goods and services, namely through the use of competent labor and effective technology, which the clients may not have at their disposition
- Ability to accommodate environmental requirements, specifically Environmental Protection Agency regulations related to the use of chemicals

## **Livestock Production Support Services**

Includes:

- Support Activities for Animal Production

According to IBIS World, “operators in the Livestock Production Support Services industry are primarily hired by livestock farms and ranches to perform support services such as boarding horses, administering vaccinations and testing milk products.” Similar to the crop services industry, the demand for the livestock production support services industry is influenced by the willingness of farms to outsource these types of services.

In order to be successful, a business in the live production support services industry needs the following:

- Having a good reputation as referrals is often the main source of new business for companies in this industry
- Locating near key markets
- Provision of superior after-sales service to maintain a loyal clientele
- Access to the latest available and most efficient technology and techniques, which will be the main reason why farms hire crop services companies in the first place
- Altering services to suit the market by diversifying, thus ensuring a more stable revenue stream
- Production of premium goods and services, namely through the use of competent labor and effective technology, which the clients may not have at their disposition

## **Animal Food Production**

Includes:

- Other Animal Food Manufacturing

According to IBIS World, “operators in this industry produce food for animals such as livestock and pets by processing raw ingredients. The products are then packaged and sold to cattle ranches, dairy farms, other animal production farms, grocery wholesalers and retailers.”

Demand for the animal food production industry is influenced by farming intensity or, in other words, the degree of industrialization of farming operations. Intensive farming operations involve a very specific diet and nutritionally modified foods for the animals to ensure a very specific



production of milk and/or meat. However, there is a growing trend favoring low intensity farming, where animals feed off of pastures and organically grown foods.

In order to be successful, a business in the animal food production industry needs the following:

- Access to high-quality inputs from healthy yields to ensure end-product quality and maintain a loyal clientele
- Ability to adapt to changing regulations, specifically USDA regulations regarding health and safety
- Production of premium goods and services
- Economies of scale and scope

## **Dairy Product Production**

Includes:

- Fluid Milk Manufacturing
- Dry, Condensed, and Evaporated Dairy Product Manufacturing

According to IBIS World, “operators in this industry manufacture dairy products such as pasteurized milk, cream, butter, yogurt, cheese and dry, condensed and evaporated milk. Operators supply these goods to a variety of market segments such as retailers, wholesale and food services.”

The demand for dairy products is generally stable, therefore industry players have a certain flexibility when it comes to pricing. An increase in input prices is therefore good news for the industry as it typically will pass along the costs by charging higher prices.

In order to be successful, a business in the dairy product production industry needs the following:

- Guaranteed supply of key milk inputs to ensure a consistent output of dairy products
- Marketing of differentiated products to set themselves apart from the competition
- Ability to pass on cost increases
- Use of specialist equipment or facilities to improve production and quality
- Economies of scale to decrease costs

The supply of milk inputs should not be a problem in Franklin County considering the strongly established dairy industry in the region.

## **Scientific Research & Development**

Includes:

- Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)

According to IBIS World, “this industry includes companies and organizations that are involved in physical, engineering or life sciences research and development (R&D). The industry only includes operators whose primary purpose is R&D and excludes players such as pharmaceutical or manufacturing companies that may undertake R&D to support their primary operations. Government entities are also excluded from this industry, though these entities may contract and fund the research this industry undertakes.”



The demand for this industry mainly comes from the Healthcare and Social Assistance and Biotechnology sectors. In order to be successful, a business in the Scientific Research and Development industry needs the following:

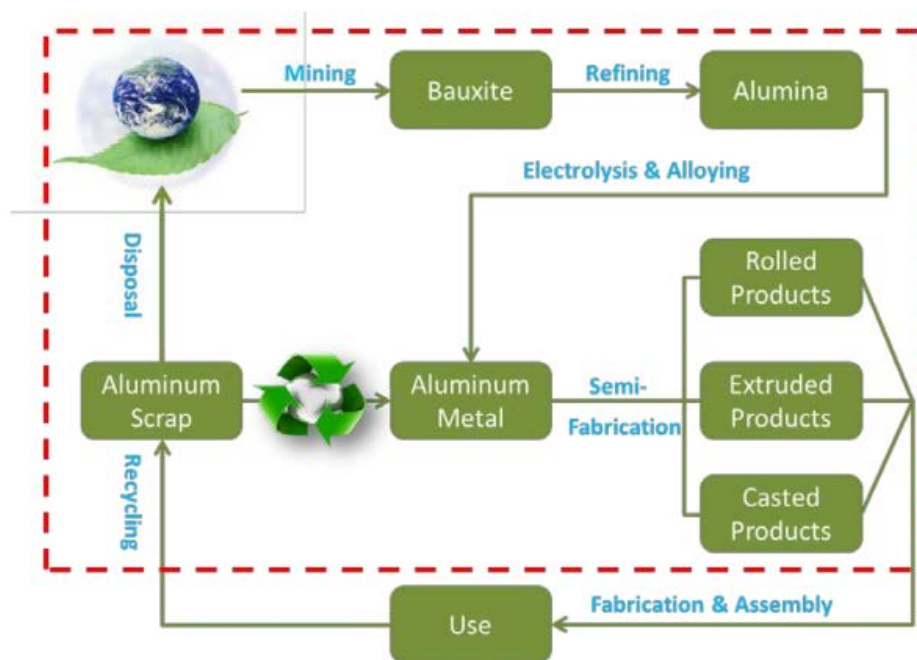
- Having a good reputation
- Provision of appropriate facilities, including laboratories and equipment
- Ability to effectively manage risk, mainly in terms of funding
- Must comply with government regulations
- Having technology sharing arrangements with major players

Franklin County is home to a few interesting players in R&D in the Physical, Engineering, and Life Sciences industry, namely the Trudeau Institute, which is open to partnerships with organizations in the United States and Canada alike. Franklin County should leverage its existing players to attract new ones.

## Other Industries to Attract

### Tier 2-3 Aluminum Manufacturing

After reviewing the reasons for the recent aluminum smelter closure in the region, it should be noted that the market has evolved and stabilized for the aluminum smelting sector. When it comes to the first step of the aluminum transformation cycle, the current market is mainly captured by Canadian and Chinese products for low-value added products (i.e. cans and foils).



Source: The Aluminum Association

The second (semi-fabrication) and third (fabrication & assembly) are mainly done in the U.S. (except for foil) to then be exported back to Canada. The Canadian market is lacking in second transformation producers, largely due to the price of liquid aluminum produced after the electrolysis & alloying processes. In other words, there is a competitive advantage for the semi-



fabricated product and the final product manufacturing business to be implemented near large consumer markets.

The tariffs currently imposed on Canadian aluminum products will increase the U.S.' attractiveness for tier 3 Canadian aluminum businesses, namely:

- Transport
- Construction
- Machinery & Equipment
- Energy
- Consumables
- Others

All of these North American industries will, in the near future, require more and more aluminum. The table below shows this related growth:

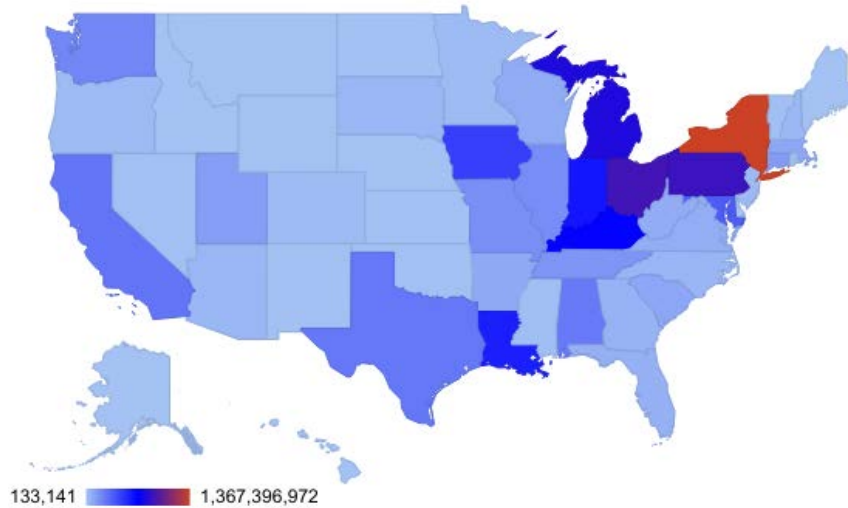
	2016 (CAGR 2010-2016)		2025f (CAGR 2016-2025)	
	Vol. (kT)	CAGR (%)	Vol. (kT)	CAGR (%)
<b>Transport</b>	4,935	9.4%	6,910	3.8%
<b>Construction</b>	1,776	4.3%	2,160	2.2%
<b>Machinery &amp; Equipment</b>	950	3.7%	1,257	3.2%
<b>Energy</b>	885	2.3%	1,118	2.6%
<b>Consumables</b>	681	4.6%	818	2.1%
<b>Others</b>	379	1.9%	441	1.7%
<b>Total</b>	<b>12,064</b>	<b>4.7%</b>	<b>15,188</b>	<b>2.6%</b>

Source: Analyse strategy& (PwC),2017

The Canadian market, having zero to very few tier 2 producers, is having more and more difficulty supplying the above-mentioned industry. Furthermore, the main market for the tier 3 Canadian producers is the U.S., particularly the State of New York and surrounding regions. The following figure represents the value by destination of Canadian aluminum exports:







Source: the CAI Global Group

In conclusion, since Franklin County has developed a certain expertise in the aluminum industry and since it is located in the heart of the Canadian – U.S. trade route, CAI highly recommends that a further analysis be conducted to pinpoint 1) the exact types of products that could be a fit in the tier 2 segment and 2) what Canadian tier 3 businesses could move to Franklin County in order to access the U.S. market at a competitive cost.

### Healthcare and Life Sciences

After running a “what if” scenario for the specific Life Sciences industry in Franklin County, it is clear that the lack of an available skilled workforce could greatly hinder the attractiveness of the region for prospective companies in this field. Nevertheless, CAI also showcased that local industry is indeed buying from peers within the same industry, but outside the region. CAI believes that this leaves an open door to this industry should opportunities arise through collaborative discussions. There are possibilities that industrial synergies might be found within the Healthcare and Life Science industry should the types of common services that local business in this sector require as well as the types of products they usually buy be identified. This could lead to some market potential.

The Healthcare and Life Science industry is broad, but synergies can arise from one of these subsectors:

Industry	Future Growth Rate (within U.S.)	2018 Employment Growth (within U.S)
Scientific Research & Development	1.2%	0.8%
Clinical Trial Data Management Services	3.1%	6.0%
Medical Instrument & Supply Manufacturing	1.5%	0.8%
Scientific Research & Development	1.2%	0.8%



<b>Laboratory Supply Wholesaling</b>	3.1%	2.0%
<b>Laboratory Testing Services</b>	1.7%	2.5%
<b>Medical Device Manufacturing</b>	3.0%	2.4%

Different industries seem to provide a decent growth potential within the Healthcare and Life Science industry. Depending on the results of an industrial synergies study, and based on Franklin County's favorable environment, an in-depth synergies study of the investment criteria for the above-mentioned industries could lead to a potential fit for Franklin County's attraction strategy.



# VALUE PROPOSITION

# FRANKLIN COUNTY'S VALUE PROPOSITION

A value proposition is a promise of value to be delivered and a belief from the investor that value will be experienced. Creating a value proposition for the region is part of Franklin County's organizational business strategy. Kaplan and Norton, experts in strategy and authors of "The Balanced Scorecard" say "Strategy is based on a differentiated customer value proposition. Satisfying customers is the source of sustainable value creation." In this case, Franklin County's customers include existing business leaders looking to re-invest as well as potential new investors. Neil Rackham, an expert in sales and marketing, believes that a value proposition statement should consist of four main parts: capability, impact, proof, and cost. Organizations do not directly communicate the outputs of the value proposition creation process (i.e., the value proposition statement and template) to external audiences; value proposition statements are internal documents, used by organizations as a blueprint to ensure that all the messages they communicate, inside and outside the organization, are consistent. Organizations use value propositions in the development of their marketing communications material or potential sales proposals.

A strong value proposition speaks directly to the target audience (potential investors, in this instance) and it illustrates the benefits of the region for them and why they should locate their investment in Franklin County. Developing a value proposition is based on a review and analysis of the benefits, costs and value that a region can deliver to existing businesses, potential businesses and other constituent groups within the region. As such, the methodology used to determine Franklin County's value proposition included one-on-one interviews and roundtable discussions with local business leaders. Based on the one-on-one interviews and the roundtable discussions, a summary of what the various participants perceive as Franklin County's advantages and disadvantages for a potential new investor or an existing business include:

## Advantages of the Region

- Availability of local raw material (in certain cases such as lumber and dairy)
- Cheap electricity
- Dedicated local workforce
- Proximity to Canada
- Good area to live in for families: great school system, safe environment, variety of recreational activities, nature, etc.
- Reliability of the courier services (Fedex, DHL, UPS, ...)
- Availability of unskilled workers



## Challenges of the Region

- Finding available workforce is difficult; finding workers with specific skills is even more challenging. There also seems to be a lack of soft skills among the local workforce (this is also recognized by local schools who are working on the issue)
- Competition from big companies nearby (in Plattsburgh, for example) for skilled workforce
- Broadband is an issue, especially as some companies look into transferring from paper to digital
- Transportation of people; people have a hard time getting from one place to another within Franklin County without a car and they have a hard time getting to nearby cities. This challenge makes attraction of young professionals and families difficult as they need to be able to move around, mostly for work and business development.
- Salaries are low

## The Proposed Value Proposition for the Region

Following the discussions and interviews held, CAI was equipped with enough intelligence to revalidate the region's marketed value proposition.

A value proposition is composed of different elements which must each prove to be:

- valuable to the investor
- rare
- costly to imitate, and
- non-substitutable.

The elements contained within a value proposition don't have to be unique, but the combination of the various factors should give a region a unique value proposition.

CAI's definition of Franklin County's value proposition is illustrated as follows:

### Workforce

#### Franklin County's General Workforce

Franklin County has an available and suitable workforce for the following general industries:

- Public Administration
- Health Care and Social Assistance
- Agriculture, Forestry, Fishing and Hunting

Furthermore, Franklin County has an unemployment rate of 6.4% as of December 2017, which is higher than the December 2016 rate (5.5%) and higher than the national rate (4.3%). Although a higher unemployment rate seems negative at first glance, this group of people is a valuable resource for potential investors who need an unskilled and/or uneducated workforce.

#### Veterans and Correctional Officers

Veterans and correctional officers represent a unique talent pool in Franklin County. Indeed, as previously mentioned, veterans and correctional officers usually retire at a relatively early age



from their initial occupation and thus represent an incredibly skilled and motivated pool of workers.

Veterans are equipped with a set of skills that makes them ideal candidates for jobs in production and manufacturing, retail management and sales, maintenance, medical services, and transportation. As for correctional officers, they are equipped with a set of skills that makes them ideal candidates for jobs in transportation, manufacturing, security, government support, and education.

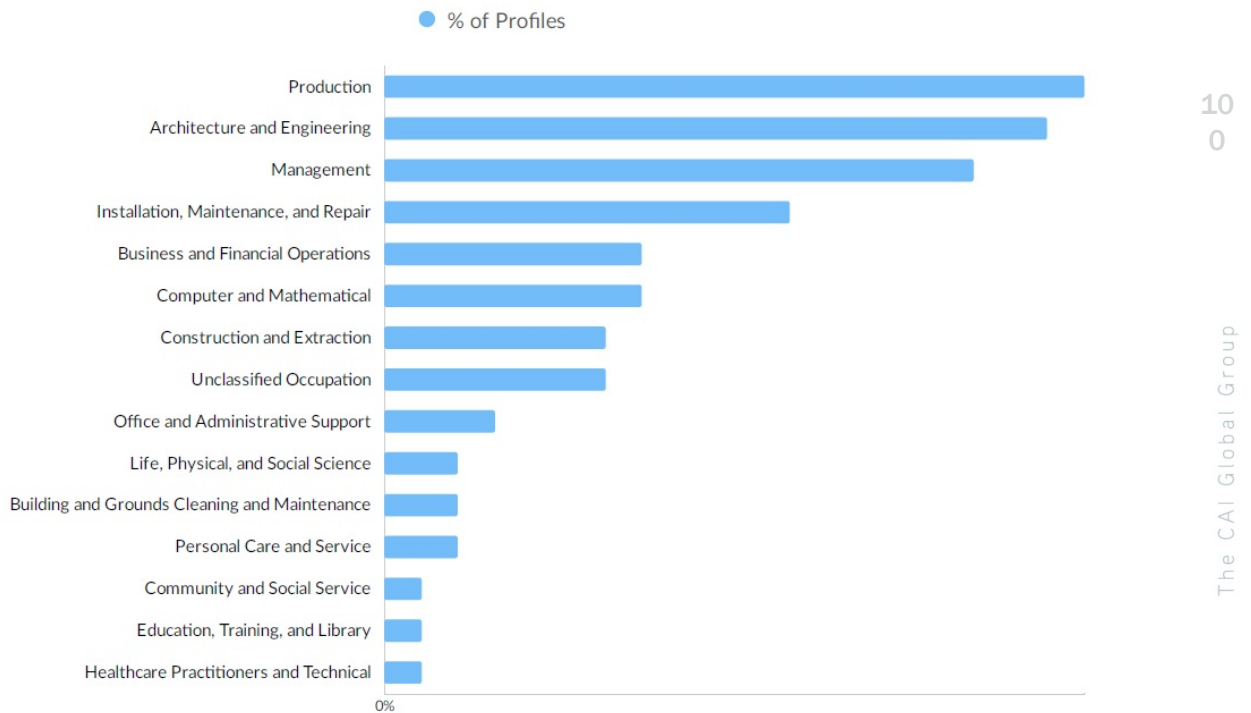
### Recent Closures of Large Companies

Unfortunately, a few large companies, including Alcoa and Pfizer, recently closed down near or in Franklin County. The upside is that these companies' employees become an important incentive for potential new investors.

Alcoa closing its Massena, NY smelting plant in 2015 caused the loss of approximately 500 jobs. Below is the breakdown of the types of jobs that were previously employed at Alcoa:

#### Top 15 Job Types Currently Employed at Alcoa Inc.

By analyzing the online profiles of people who work at Alcoa Inc., we can estimate the relative size of each job type within the company. This helps us understand how the company is currently structured.

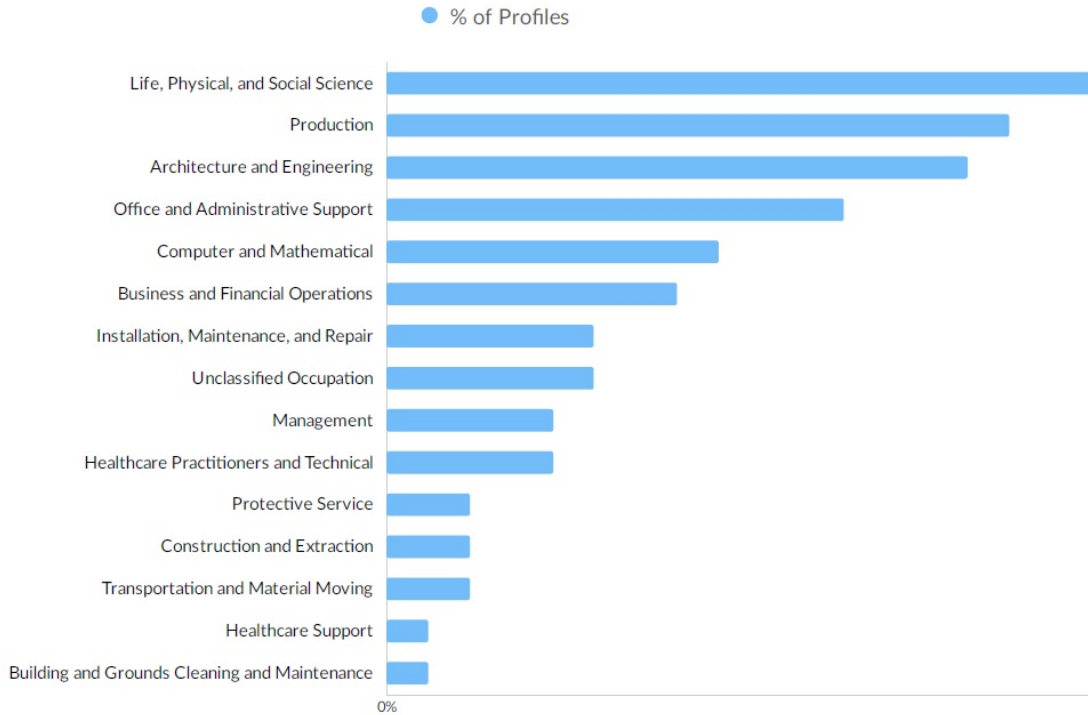


Pfizer closing its Rouses Point, NY plant at the end of 2017 caused the loss of a total of 120 jobs. Below is the breakdown of the types of jobs that were previously employed at Pfizer:



## Top 15 Job Types Currently Employed at Pfizer Inc.

By analyzing the online profiles of people who work at Pfizer Inc., we can estimate the relative size of each job type within the company. This helps us understand how the company is currently structured.



## Low-Cost Utilities

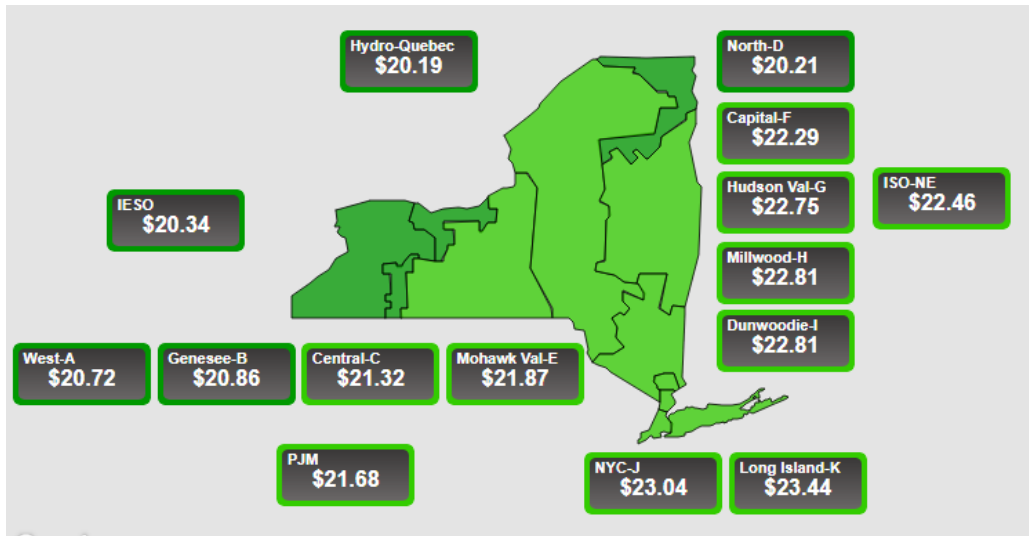
Electricity in the area of Franklin County is among the least expensive in the United States. On average, it falls 17.5% below the national average industrial rate of 6,64 cents/kWh, down to 5,58 cents/kWh. As seen in the section “UTILITIES AND ENERGY ANALYSIS”, the North Country will generate important surpluses of electricity during the next decades. These surpluses of clean energy cannot be sold directly to New York City, due to the ageing of the electric grid and bottleneck effects along the way.

As long as the New York grid is not replaced or improved, North Country is stuck with surpluses, giving the area a net advantage in developing energy-consuming industries such as data centers, aluminum transformation facilities or bitcoin mining activities. Surpluses are expected to weigh between 6,000 and 8,000 MW, according to 2015 estimates.

- Clean energy includes hydroelectricity, natural gas, wind turbines, and solar power.
- Both the St. Lawrence-Franklin D. Roosevelt Power Project, in Massena (NY) and the Hydro-Québec interconnection 765 kV line between Chateaugay (QC) and Massena (NY) give Franklin County a direct access to a stable, cheap and reliable supply of energy.
- NYPA’s Moses-Adirondack Smart Path Reliability project is also an interesting asset. Its completion is due in year 2023.







Rates as of 2018-09-10. Source: Real-time index at [http://www.nyiso.com/public/markets\\_operations/market\\_data/maps/index.jsp](http://www.nyiso.com/public/markets_operations/market_data/maps/index.jsp)

## Port and Railway Infrastructures

The Port of Ogdensburg is the first Foreign-Trade Zone (FTZ 118) encountered on the St. Lawrence Seaway entering the United States, its strategic importance cannot be underestimated. The creation of intermodal facilities or an expansion of the industrial zone (in St. Lawrence county) that is adjacent to the mentioned Foreign-Trade Zone are interesting development avenues. That industrial zone includes the Port of Ogdensburg, the Ogdensburg-Prescott International Bridge (along the St. Lawrence River), and the Port of Oswego (on Lake Ontario). U.S. imports passing by the Port of Oldenburg every day cover both the European and International markets.

Furthermore, Ogdensburg is also a gateway to the Fourth Coast, giving way for direct trade with the Canadian economy, through the Great Lakes and Greater Toronto, as well as with the cities of Cleveland, Detroit and Chicago.

Local railways like the old New York and Ogdensburg Railway or spurs, as well as local connections to the CSX intercontinental railways, should also be as considered regional assets.

- A Foreign Trade Zone is a secure area located in or near U.S. Customs and Border Protection (CBP) ports of entry, but legally considered to be outside the Customs territory for the purpose of tariff laws and CBP entry procedures. Merchandise admitted into a zone may be stored, exhibited, repacked, assembled, distributed, sorted, graded, cleaned, processed, tested, labeled, repaired, and mixed with foreign or domestic merchandise otherwise manipulated, destroyed, or manufactured.
- Intermodal freight transport involves the transportation of freight in an intermodal container or vehicle, using multiple modes of transportation (e.g., rail, ship, and truck), without any handling of the freight itself when changing modes. The method reduces cargo handling, and so improves security, reduces damage and loss, and allows freight to be transported faster. Intermodal facilities are an important part of and any logistic hub.





Tonnage of Trailer-on-Flatcar and Container-on-Flatcar Rail Intermodal Moves: 2011 Map

## Proximity to Canada

Franklin County’s proximity to Canada is a major advantage. As a matter of fact, Area Development magazine, a leading executive magazine covering corporate site selection and relocation, solicits corporate executives’ input about a myriad of location factors for its Corporate Survey and, in 2015, 76.3% of respondents rated Proximity to Major Markets as a “very important” or “important” location factor. Therefore, Franklin County’s proximity to Quebec and Ontario, more particularly, makes it an attractive destination for companies on either side of the border looking to expand their market to the other side or whose activities require frequent transportation of people or products from one country to the other.



# **ACTION PLAN**

# INTRODUCTION

Based on the industry analysis and defining of the value proposition, CAI came up with a step-by-step action plan to reach Franklin County’s business retention and attraction goals. Below is a table with the main recommendations accompanied by the corresponding actions, the scheduling of those actions (when they should take place), the timeframe (how long they should take), and the person or team responsible for each. This action plan should take place within the next 5 to 6 years.

Recommendations	Actions	Scheduling	Timeframe	Person or Team Responsible
Create a communications plan for business attraction, based on the supporting supplier industries of Camoin-identified clusters	Attraction of the identified supporting suppliers to strengthen the current clusters <ul style="list-style-type: none"> <li>• Web based strategy (mainly the website)</li> <li>• One plan for each targeted industry</li> <li>• More details on communications plan below</li> </ul>	Year 1	1 year	<b>Russ Kinyon</b> Director of Economic Development Franklin County, NY
Create a communications plan for the main occupations needed	<ul style="list-style-type: none"> <li>• Web based (mainly the website)</li> <li>• One for each occupation category</li> <li>• More details on communications plan below</li> </ul>	Year 1	1 year	<b>Russ Kinyon</b> Director of Economic Development Franklin County, NY
Develop a promotional strategy for Canadian and Quebec based companies	<ul style="list-style-type: none"> <li>• Partnerships with relevant Canadian association and ministries</li> <li>• Webinar training on “how to do business in Franklin County” and on trade tariffs</li> <li>• Use foreign “Empire State Development representative” to support initiatives</li> </ul>	Years 2 to 4	2 years	<b>Russ Kinyon</b> Director of Economic Development Franklin County, NY



Recommendations	Actions	Scheduling	Timeframe	Person or Team Responsible
Develop the infrastructure in the Chateaugay business park	<ul style="list-style-type: none"> <li>Prepare subdivisions based on the recommended industries</li> <li>More details on infrastructure below</li> </ul>	Years 2 to 6	5 years	<b>Jeremy S. Evans</b> CEO County of Franklin Industrial Development Agency (IDA)
Develop an industrial synergy study for the Healthcare and Life Sciences local industry	Synergy study to find out which types of companies the local industry buys from specifically, as these suppliers will become interesting companies to attract to the region to strengthen the R&D and Biotechnology cluster.	Year 2	1 year	<b>Russ Kinyon</b> Director of Economic Development Franklin County, NY
Develop a prospecting plan for tier 3 Canadian aluminum businesses	<ul style="list-style-type: none"> <li>Study of the main products in demand in the U.S.</li> <li>List of Canadian businesses supplying U.S. firms</li> </ul>	Year 3	1 year	<b>Russ Kinyon</b> Director of Economic Development Franklin County, NY

## Communications Plan

Based on CAI’s understanding of the available resources within Franklin County, the action plan has been adapted to reflect the reality of these limitations.

Jurisdictions are in fierce competition today vying for investors’ attention. A key component for Franklin County within its communications plan is to drive home the facts; **access to data**, particularly from a site selection perspective, is key. This data translates into the County’s website, communications strategies and certainly any Requests for Information (RFI) or Requests for Proposals (RFPs).

The foreign investor is typically sophisticated and rational, and looks for value-added information as early as possible. Typically, the investor will try to reduce the cost and time of the search as much as possible (oftentimes by seeking something that is “good enough” or simply satisfactory.) The foreign investor is rational because they have limited attention to commit to the site search and they will typically stick to preconceived ideas and known information. It is simple: the human being necessarily restricts itself; bound by “cognitive limits”. These two attributes of a (foreign) investor means one important thing for the economic developer: **you must show the value of your region quickly**, and the main way to do so is by justifying your argument with facts and being prepared to reply to inquiries.

Site selection decisions are happening faster than ever; instead of having several weeks to turn data around, economic developers are lucky if they get a week, which is a trend that it unlikely to reverse itself. Furthermore, inquiry handling is now at the core of investment promotion as it

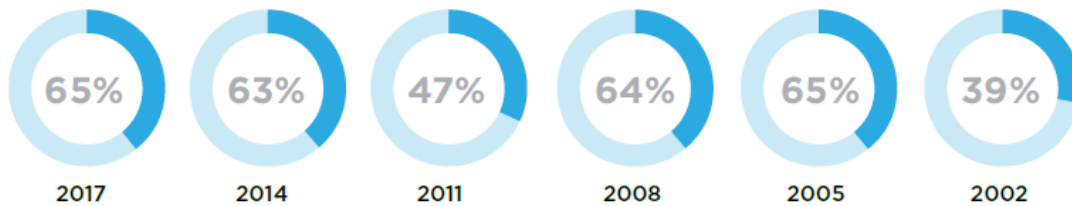


allows for economic development agencies to influence company perceptions and win investment projects.

Here are some tips to be ready to quickly and effectively answer inquiries, which will be the basic first step to becoming more competitive and attracting more investment to Franklin County:

1. Ensure that your website, particularly the inventory of available sites and buildings, is complete and up-to-date; make fact finding an easy process. In a survey conducted by Development Counsellors International (DCI) in 2017, 65% of respondents (corporate executives and location advisors) are likely to visit an economic development organization’s website during their next site search.

**Chart H: Likelihood of Visiting Economic Development Organizations’ Websites During Next Site Search % Rating 4 or 5 on a 5-Point Scale (Response over Time)**



Source: A View from Corporate America: Winning Strategies in Economic Development Marketing” DCI 2017

Below are some indicators to evaluate your “available properties readiness” level:

**Basic Readiness**

- Electronic, downloadable format
- Available for download on website
- Property listings contain the following information (including a listing sheet for each industrial park or property)
  - Allowable uses
  - Lease or purchase price
  - Location
  - Size, including minimum and maximum land/building available
  - Zoning (type and category)
  - Access to transportation networks
  - Owner/agent contact information
  - Previous use of land or building

**Better Readiness**

- Lists commercial properties in addition to industrial properties
- Property listings are available in an online database and can be searched and sorted based on user-defined criteria
- Property listings also contain the following information
  - Downloadable property data sheet for each listing
  - Taxes
  - Electricity provider and size of electrical service
  - Heating costs
  - Water and sewer provider (municipal/private) and main size in cm/inches
  - Information regarding site contamination
  - Telecommunications provider and related information
- Building listings (if available) contain the following additional information
  - Year of construction
  - Total square feet/meters
  - Dimensions in feet/meters
  - Ceiling height in feet/meters
  - General conditions
  - Record of site contamination
  - Age
  - Number of storey
  - Number of truck docks and drive in doors
  - Heating costs

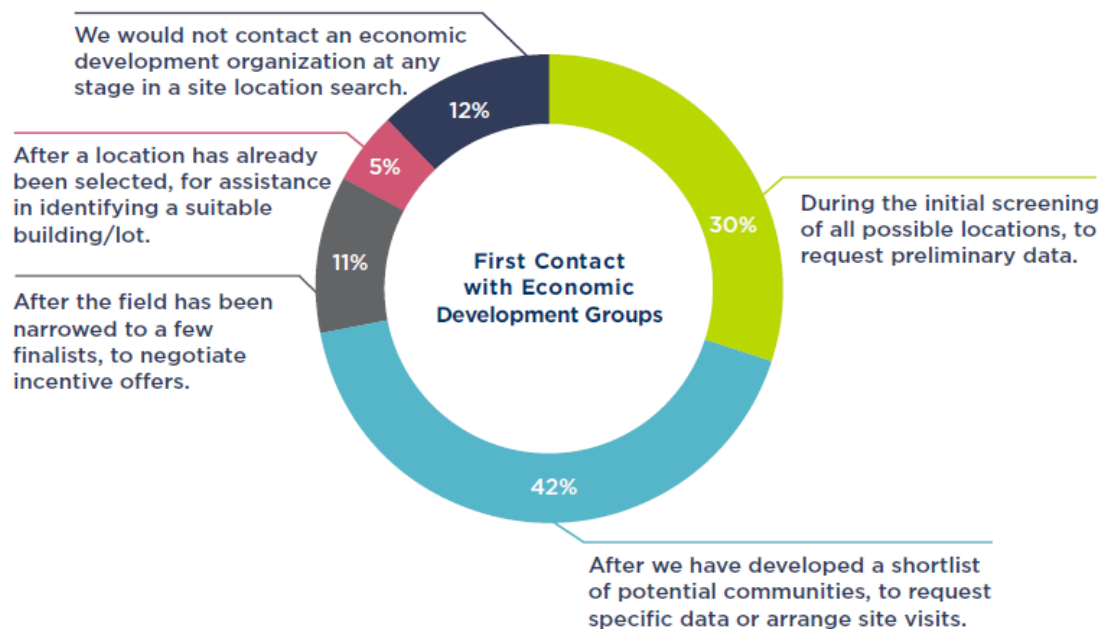
**Best-of-Class Readiness**

- Properties can be mapped with GIS functionality
- Demographics can be mapped and searched surrounding the property based on user-defined buffer area
- Businesses can be mapped in user-defined buffer area (user selects business type to be mapped)
- Data for multiple properties can be downloaded in multiple formats



- Have information on available properties, labor force, incentives, transportation (highway, rail, air, port), and utilities (sewer, water, electric, natural gas, telecommunications) readily available and current. If possible, have industry-specific information for the industries you are targeting (for example: competitors/suppliers in the area, industry-specific workforce, industry-specific educational programs, etc.). Keep in mind that the site selection process is usually quite advanced by the time the investor or site selector reaches out to you. Indeed, in that same survey by DCI, 42% of respondents indicated that they first contacted the economic development groups once they had developed a shortlist of potential communities, to request specific data or arrange site visits.

**Chart L: First Contact with Economic Development Groups**



Source: A View from Corporate America: Winning Strategies in Economic Development Marketing” DCI 2017

- Showcase your community’s growth projections: labor projections, tax reforms, community initiatives affecting the business ecosystem, construction and upgrades to key infrastructure, etc. Although the available sites in your county may not have all the requirements for a project when you receive an inquiry or an RFI, what is important is that those requirements are met when the project starts. First, make sure you understand the project’s requirements and timeline. Second, identify what upgrades you are willing and capable of doing and the timelines on those upgrades. Finally, let the site selector or investor know which requirements you will be able to put in place by the time the project starts. This could make the difference between your jurisdiction being eliminated versus your jurisdiction being shortlisted.
- Maintain the communication between the investor or site selector by asking strategic questions and answering their questions promptly. Leveraging every communication opportunity with the investor is more important than ever.





5. Promote your current assets especially buildings, land, and business parks. Some of your main marketing tools are your website, social media, email marketing, and partnerships with local stakeholders such as real estate organizations, the North Country Chamber of Commerce, lawyers, accountants and others who may be first-line communicators. These are ways to market available assets as well as interesting news and data about the county.

Your current facilities are not limited to available buildings, land, and industrial parks; they also include spaces in buildings that are currently in use. For example, during the Biotech roundtable that took place during CAI's visit to Franklin County, the representative from the Trudeau Institute expressed that the Trudeau Institute has enough space to welcome other labs. This offer is attractive to a small biotech company as they would have access to a potentially low-cost space as well as state-of-the-art equipment and experts, creating a unique synergistic environment.

## Promotional plan for Canadian & Quebec based companies

As stated previously within the study, Quebec and Ontario are major markets to tap into, with Franklin County having the geographic advantage of being so close to the Canadian border. Quebec's small to medium enterprises are usually managed and/or owned by French speaking entrepreneurs, many of whom do have a working knowledge in English, unlike Ontario, which is English. Therefore, to use French language promotional tools as often as possible to promote the value proposition to the targeted sectors will likely receive more readership than in English alone. This can be a differentiating factor over the other states or jurisdictions competing for these same potential clients. CAI has seen more states than ever before attempting to communicate to the Quebec business community in French. Advertising decisions should also be sensitive to the French Canadian in order to reach the largest audience.

## Promotional Tools for Quebec-based Potential Investors

A Quebec specific marketing campaign must include the following activities:

- A French language advertisement in the (French) business newspaper like "Les Affaires"
- Develop a seminar regarding the commercial tariffs
- Initiate (or tag along) trade missions to Montreal
- Partner with or be involved in existing seminars with organizations such as Quebec International, Montreal International, the Chamber of Commerce in Montreal (CCMM) and other organizations that help their members expand.
- Build a relationship with key sectorial groups in Quebec like the "Montreal Invevo" & "AluQuébec" which are specialized clusters in the healthcare sector and in the aluminum industry.
- Develop a seminar specifically regarding the intricacies of Buy America and Buy American for the transport and construction companies.

The usage of existing partnerships (North Country Chamber of Commerce) can be used as a leverage in order to accelerate and maximize the relationship building with Quebec organizations



## The Ontario Promotional Strategy

An Ontario marketing campaign must include the following activities:

- Reinforce your relationship with the ESD representatives of New York in Toronto.
- Initiate or tag along on trade missions to Toronto, Mississauga, London, Sarnia, Chatham-Kent, Windsor, and Cornwall
- Research the viability of developing or getting involved in existing seminars on how to set up a business in Franklin County with the The Ministry of Economic Development, Job Creation and Trade and other organizations that help their members expand.
- Develop a seminar specifically regarding the intricacies of Buy America and Buy American for the transport and construction companies.
- Develop a seminar regarding the commercial tariffs

## Infrastructure

It is clear that maintaining available buildings is costly; it is difficult to evaluate the length of time that a building will remain vacant. It is also difficult to decide to what extent a building should be maintained or if it is worth maintaining at all. Furthermore, the construction of a new building without a confirmed investor is far too risky and costly for Franklin County. Quite frankly, investors with specific needs tend to look for land where they can build a facility from scratch, which can be less expensive than revamping and adding expansions to an old existing building.

It was mentioned during CAI's visit to Franklin County that creating a visual prototype of a potential building that could be built on a vacant land is a project that is being taken into consideration. A visual prototype could indeed be a useful tool in marketing the possibilities of a vacant land particularly at an advanced stage of negotiation with a potential investor.

CAI's analysis of the Camoin-identified industries showed that Chateaugay is the best equipped for companies to find the suitable workforce. Therefore, any development and marketing efforts should be concentrated on the Chateaugay Business Park in the short and medium-term. In terms of utilities, based on our analysis, installing a 6 to 8-inch water line and ensuring a dual electrical power feed would ensure proper supply of these resources for industries such as food manufacturing and R&D.

When replying to any inquiries related to infrastructure, the following are some key factors (relating specifically to infrastructure) that should be included in the response:

Note that CAI has chosen to use the private-sector industries identified by Camoin as examples.

### Food Manufacturing

- Proximity to the supply chain, more particularly, **proximity to the raw materials** needed for production;
- Access to large amounts of **water and waste-water processing capacity** (water supply, water treatment and sewer system);
- Sufficient **warehousing space**;
- Access to **additional land to allow for future expansion**;



- Certain types of food manufacturing produce odors which may affect neighboring businesses or residential areas therefore they may need to be located on a **large piece of land**;
- Food manufacturing activities are also affected by their surrounding areas therefore they may need to be located in an **area that is clear of odors, dust, and other potential contaminants**;
- According to an article titled *Location Trends in the Food Industry: What's Driving Decision-Making in 2017?* published in 2017 in Area Development magazine, "the food industry is in an incredibly dynamic state, with constant change being the only predictable norm." This need for innovation in the food industry is due to many factors, namely the "growing demand for products that address increasingly specific health, ethnic, portion control, dietary, freshness, and ingredient demands." Therefore, food manufacturing companies need to be in a location that allows for quick modifications to processing lines within the facility. This requires **ample column spacing, clear height, and exterior space for large process utility equipment and vehicular movement**, among other things;
- The investor may require that a **building that is qualified by the United States Department of Agriculture (USDA)**, such was the case in an RFP forwarded by ESD in January 2018

#### **PROJECT FROZEN (2014)**

*The Project Frozen case illustrates a real-life example of a company that had to invest in its facilities because of limitations in three of the key factors identified for the food manufacturing industry: space for expansion, access to sufficient warehousing space, and access to sufficient water and water treatment systems.*

The company from Project Frozen is one of the leading canned and frozen food processing companies in the world. It has processing facilities in three cities in the state of New York that are supplied with raw vegetables almost entirely from growers in the State. Over 99% of all vegetables processed and ultimately frozen at these facilities are grown in the State and supplied by an agriculture service company based in NY which supplies processors with a variety of crops.

At the time of the project, the company's management assessed the situations of those three facilities and identified the main challenges for each. Below is a sample of the identified challenges.

##### **Facility 1**

The facility is currently land-locked: there is no available space for a physical expansion of the facility. Extra space could be used to optimize packaging lines or increase cold and dry warehouse space.

##### **Facility 2**

In addition to a low volume of production output, this facility does not currently have any frozen storage and warehousing space. While this issue is not current in the frozen industry, it does force Facility 2 to ship production to another one of the company's facilities immediately. The ability to maintain a minimum amount of temporary frozen storage on site would be an asset. The lack of in-house frozen storage space was identified by the



company as a challenge facing its ability to grow in the United States. In order to alleviate this issue, the company is proposing to build a new 80,000 to 100,000 sq. ft. cold storage facility close to the facility. Alternatively, two separate 40,000 to 50,000 sq. ft. warehouses could be built at two different sites. Having additional cold storage space in one or many of their facilities would increase production flexibility and reduce transportation costs.

**Facility 3**

The vegetable cleaning and blanching processes require a significant amount of water and as such, the resulting waste water must be disposed of effectively. The company complies with New York State’s Department of Environmental Conservation (NYS DEC) regulations on the amount of water it may use and dispose of in this fashion. The water used in the processing at Facility 3 is sourced from onsite wells and is treated at the plant. However, the ability of the lagoon to remediate waste water from the plant is limited because of those NYS DEC regulations. Specifically, the volume of water being remediated is limited to a set amount per year and can only be done at certain times of the year. As a consequence of these limits, there are added constraints on production and volumes. The lagoon requires periodical remediation in order to continue to be operational and would require a replacement liner.

**PROJECT COOKIE CASE (2011)**

Below is an example of the site and facility requirements included in an RFI produced by CAI for Project Cookie in 2014. This was a US\$43.5 million-dollar project with creation of 100 direct new full-time jobs by a Quebec-based manufacturer of granola bars, crackers and cookies seeking to deploy a new manufacturing facility in the south of the United States.

11  
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**SITE/FACILITY REQUIREMENTS**

Total Land Requirement	15 to 20 acres
Total Size of Building Footprint	150,000 sq. ft. footprint Minimum column spacing: 30 ft. by 50 ft.
Height Requirements	Minimum 25 ft.
Warehouse access	Approx. 40,000 sq. ft. Minimum of 5 to 7 truck docks
Road Access	Within 2 miles of Interstate
Port Access	Not required
Rail Access	Buildings with a <b>rail spur on site</b> will be heavily preferred
Air Access	Not required
Topography	Prefer flat but can accommodate some unevenness
Zoning	Industrial
Environmental & Archeological Reports	Phase 1 required (if available)



## PROJECT NAPOLÉON (2015)

Below is an example of the site and facility requirements included in an RFI produced by CAI for Project Napoléon in 2015. This was a CAD\$28.8 CAPEX investment with the creation of 200 direct new full-time jobs by a Quebec-based manufacturer of frozen bakery and pastry products seeking to build a new plant in the province of Quebec.

### SITE/FACILITY REQUIREMENTS

Total Land Requirement	250,000 to 400,000 sq. ft.
Total Size of Building Footprint	125,000 sq. ft.
Height Requirements	26 ft.
Road Access	Important – needs to be close to highway for market access
Port Access	Not required
Topography	Prefer flat
Zoning	Industrial
Adjacent Zoning	Industrial preferred

It was also specified in the RFI that access to water and sewer systems was crucial to the project considering the important use of water by the company for its food manufacturing activities and water treatment done on site. A water consumption of 50,000 liters of water per day was planned for this project.

## Biotechnology/Pharmaceuticals

Businesses in the biotechnology and pharmaceutical industries require highly controlled environments to avoid any contamination. Therefore, they need:

- To be located in an **environment that is as free of contaminants as possible**, which means that the activities taking place in the area where they wish to be located is a key factor. For example, the fact that Bionique is located in such a clean and isolated area is beneficial to their operations as they are highly impacted by their neighboring environment and do not use clean rooms.
- **Reliable access to all utilities** (water, energy, telecom, etc.), which means that they will favor dual sources for each to ensure a proper backup. For example, Bionique had to build two wells when their facility was first established because it was not attached to the city water system. They also invested in a backup generator to avoid risks of power failure and built their own septic system. The precautions they take in terms of utilities is typical in the industry and has nothing to do with their location.
- **Reliable transportation/courier services**. For example, Bionique depends on the reliability of courier services such as Fedex, DHL, and UPS as they cannot afford to have delays or interruptions. Indeed, because they are a testing lab, clients ship samples to them from all over the world.



## Forestry and Logging

Typically, this site selection projects for this industry require:

- Access to **raw materials (wood)**. For example, Tupper Lake Hardwoods is implanted in its current location mainly for the available supply of wood;
- **Proximity to sources of demand for wood** (namely sawmills and pulp and paper mills): According to a report titled *Northern New York's Forests: Timber Supply, Workforce, Infrastructure & Markets* published in November 2016 by the ANCA, the supply chain infrastructure to move timber to market that includes harvesting and trucking is in place in the region and is adequate to supply the existing forest products markets at their current level, but not at increased demand levels. However, it seems as though the current issue is rather a potential loss of logging capacity, mainly due to retirement and loss of loggers to other industries such as construction and the prison system. "If a significant portion of the current capacity exits the market, mills will struggle to harvest and deliver wood, and this will challenge the economics of continued operation or investment." Mills can support the logging infrastructure simply by providing a market and paying market prices, and also by supporting logger training and education programs like the logger training center at Paul Smith's College.

## Logistics

The logistics industry was included as part of the preliminary analysis since CAI does not recommend focusing on logistics as an industry to attract to the region. However, in the case that a logistics inquires about Franklin County, the information below may be useful.

Businesses in the logistics industry such as Bee Line Logistics, Trucking and Warehousing rely on the **quality of the transportation system**, which means that, depending on the transportation mode they prefer, they may require proximity to:

- A highway, or more specifically an interstate highway
- Rail or access to a rail spur on site
- A port
- A local or international airport

As for the building itself, their requirements are usually related to:

- Building size;
- Lot size (to allow for vehicle movement outside the building);
- Loading docks.

A **traffic study** may also be required by an investor in the logistics or transportation industries. This study will determine whether or not certain roads should be enlarged, if signage should be adjusted or if a rail spur must be put in place, for example. For warehousing and distribution activities, there should be the least obstacles possible, such as level crossings, drawbridges or school zones, between the site and the highway.





# APPENDICES



# APPENDIX A: DEFINITION OF TERMS USED IN THIS REPORT

## Location Quotient

A location quotient (LQ) is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

## Shift Share

The shift share analytic sheds light on the factors that underlie regional employment growth. Shift share examines three factors that underlie employment growth. National Growth is growth due to the overall growth or contraction in the national economy. Industry Mix Share is the growth attributable to the specific industries being examined (based upon national industry growth patterns and the industry mix of the region). Local Competitiveness is the remaining growth or contraction that is attributable to regional factors. A positive number here indicates a productive advantage in this industry (that may be due to superior technology, management, labor pool, etc.).

## Separation Demand

Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. The total projected demand for an occupation is the sum of the separation demand and the growth demand (which is the increase or decrease of jobs in an occupation expected due to expansion or contraction of the overall number of jobs in that occupation).

## Cluster

A cluster is a geographic concentration of interrelated industries or occupations. If a regional cluster has a location quotient of 1.25 or greater, the region is considered to possess a *competitive advantage* in that cluster.

## What is the difference between industry wages and occupation wages?

Industry wages and occupation wages are estimated via separate data sets, often the time periods being reported do not align, and wages are defined slightly differently in the two systems (for example, certain bonuses are included in the industry wages but not the occupation wages). It is therefore common that estimates of the average industry wages and average occupation wages in a region do not match exactly.

## What is NAICS?

The North American Industry Classification System (NAICS) is used to classify business establishments according to the type of economic activity. The NAICS Code comprises six levels, from the “all industry” level to the 6-digit level. The first two digits define the top level category, known as the “sector,” which is the level examined in this report.

## What is SOC?

The Standard Occupational Classification system (SOC) is used to classify workers into occupational categories. All workers are classified into one of over 820 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 96 minor groups, and 449 occupation groups. Each occupation group includes detailed occupations requiring similar job duties, skills, education, or experience.

# APPENDIX B: DESCRIPTION OF INTERVIEWS AND ROUNDTABLES

During the visit to Franklin County and through the phone interviews that took place in the following weeks, the CAI team met with and/or spoke to key actors from the following active industries in the region:

- Biotechnology
- Food manufacturing (mainly dairy)
- Lumber
- Logistics (including warehousing and trucking)

## One-on-one Interviews

CAI's one-on-one interviews were primarily conducted over the phone and, unstructured, lasted between 15 minutes to 1 hour. The goal was to gain a better understanding of the visions of local actors that play a role in the region's economic development. The list of people successfully reached for the interviews include the following:

- Chris Dewyea at Tupper Lake Hardwoods on June 8<sup>th</sup> 2018
- Greg Sample at Bee Line Logistics on June 12<sup>th</sup> 2018
- Tony Green at Agrimark on June 8<sup>th</sup> 2018

## Roundtable Discussions

Two roundtable discussions were organized during the CAI team's visit to Franklin County in May 2018: one with representatives from the local biotechnology industry and one with representatives with local educational institutions. Below is a list of the representatives present at each one of these roundtables:

### Biotech industry roundtable

- Jill A. Mariano, M.D., President of Bionique
- Gladis Zamparo, Chief Financial Officer at Bionique
- Laurie Stephen, President of Ampersand Biosciences
- Dr. Atsuo Kuki, President of the Trudeau Institute

### Education roundtable

- Cathy S. Dove, President of Paul Smiths College
- Representative from North Country Community College

## Other meetings

- Airport
- Wild Center
- Adirondack Club and Resort
- Malone Golf club

- Martin's Country Store
- Chateaugay Town Hall
- One on one discussions during the Job Fair in August 2018??

# **APPENDIX C: WHAT-IF TABLES FOR COMPLEMENTARY INDUSTRIES**