Prepared for

Town of Johnson
293 Lower Main West
PO Box 383
Johnson, Vermont 05656

Final Report: Light Industrial/ Commercial Park Development in Johnson, Vermont

June, 2012

Prepared by

YELLOW WOOD
associates, inc.

Yellow Wood Associates, Inc.
228 North Main St.
St. Albans, Vermont 05478

[This page intentionally left blank.]

Final Report on Light Industrial/Commercial Park Development in Johnson, Vermont

Table of Contents

Figures and Tables

A Story of Rural Industrial Park Development

The **Flathead Electric Cooperative**, headquartered in Kalispell, Montana, owns the **Evergreen Rail Industrial Park** (ERIP) as a wholly owned, non-cooperative subsidiary. The Cooperative eventually decided to develop the property in a selective manner, because development would be adjacent to its offices. Realizing that embarking on a course of industrial development would mean that a considerable period of time might pass before a positive return on investment happened, the Coop decided to maintain control over the type of development that would have surrounded it, rather than selling it to a private developer. By undertaking the development themselves, the return to the Coop would be higher and could be structured in a way to provide an ongoing source of income for the Coop. Investments included converting the raw land into a viable development site, as well as investments in water, roads and sewage systems. Since the community regarded the cooperative as a good corporate citizen, and endorsed the cooperative's design plan, negotiations around sewage capacity proceeded without incident.

In 1995, the cooperative created the wholly owned subsidiary with the cooperative as the sole shareholder. A separate board was created to oversee ERIP and develop the land as a light industrial park. To reduce the cash outflows, the coop sold three lots and used the proceeds to pay for development expenses. Other lots are being leased on a 15-year basis with renewal terms in the lease. ERIP is being marketed to existing businesses that are looking for a new location and can pay the current price. If a company came to ERIP that had limited cash but was seen as a desirable tenant for the park, there is some possibility of Flathead providing a different lease structure that back-loaded payments to allow the company to locate at the park.

Flathead's strategic approach was about not rushing into development to recover its funds faster, but rather a concern with maintaining control over what went on the property and a willingness to make additional investments with the expectation of higher profits with a longer time frame.

Source: Zeuli et al. Non-agricultural Cooperatives in Rural Areas: Fourteen Case Studies. Case Study Series, University of Wisconsin Extension. 2003.

Executive Summary

Introduction

The Town of Johnson has an option on a piece of land on which it would like to develop a light industrial/commercial park. This is the only undeveloped property of its size within the "business area" of the Town of Johnson. The Town has already engaged the services of an engineering firm to develop a site plan for the proposed site. Now, the Town would like to know whether demand exists for space in a Johnson light industrial/commercial park as currently designed, what amenities and infrastructure potential tenants demand, and, if sufficient demand exists, what next steps the Town of Johnson should be taking in bringing the light industrial/commercial park into being, including any possible changes in park design to address market demand.

Does Demand Exist?

The potential Johnson light industrial/commercial park will be competing with existing parks. There are four "industrial parks" in the region, including one in Hardwick (focused on agribusiness and also housing the Vermont Food Venture Center), one in Morrisville, one in North Hyde Park and one in Cambridge. Between those parks, there may be 2-3 lots available in Hardwick, none in the Lamoille Industrial Park in Morrisville, four unsold lots in the Cambridge Enterprise Center (according to John Mandeville, these are unbuildable), and five "shovel ready" lots available in North Hyde Park.

In terms of location, Johnson would be preferable to North Hyde Park due to its closer proximity to transportation and markets. The industrial park in North Hyde Park started 15 years ago with 15 one-acre lots. According to Marvin Locke, the park owner/manager, it was about 5 years until someone purchased a property. Some businesses have bought more than one lot. There is a landscaping business (which has bought 5 lots), a body shop for trucks (which has bought 2 lots), a government project, and others. According to Locke, it is a tough climate to sell commercial property. Yet, Locke has been able to sell 10 lots in 15 years.

Morristown is considering building an industrial park in the designated Business Enterprise District (BED) zone on the south side of town, according to Mandeville, but "even if that were to come to fruition, it is years away from reality." If Johnson acts in a timely manner, is ready to move when the economy turns around, builds on its assets and focuses on the sectors described below, we believe a Johnson light industrial/commercial park can compete successfully over time.

The light industrial/commercial park that the Town of Johnson is exploring would offer municipal services (sewer and water, 10,000 gallons per day of wastewater capacity, electric through the Village of Johnson Water & Light Department); mixed use land use; and information technology possibilities including Comcast, Cable, DSL and fiber optic for lots that tenants would buy and then build on. Since businesses would need to invest in their own buildings, and this is a significant investment for a new business, it is unlikely that a start-up or an entrepreneur would be interested in a parcel in this park. It is more likely a parcel in this light industrial/commercial park would be attractive for an existing business that has been operating at a smaller scale, but is ready to scale up.

These could be businesses in and around Lamoille County or businesses from elsewhere that may be interested in the recreation and quality of life opportunities provided by Lamoille County. Research indicates that some expanding businesses prefer to lease property while others are interested in ownership.

Experiences of other rural communities, in Vermont and elsewhere, suggest that the Town should assume that the park will require at least a decade to build out. This means the Town needs to be prepared to allocate staff and other resources to the park as an ongoing effort if it is to succeed. The extent of direct Town involvement will depend on whether or not the Town can identify a development partner with an interest in purchasing the property from the Town and taking on the responsibility for its development. Based on limited research, and given current economic conditions, no one with whom we have spoken has shown interest in this kind of partnership. (See the Interim Report for a detailed discussion of partnering options.) However, there are steps the Town can take, detailed in the final report, to improve the incentives it is able to offer to businesses that could, in turn, increase the interest of potential partners. We also recommend a discussion with David Hallquist, CEO of Vermont Electric Cooperative, to explore a more active role for the Cooperative in the development of the park. Some electric cooperatives have had positive experiences as developers of industrial/commercial parks. As with most complex endeavors of this sort, capturing the apparent opportunity will require patience and some ongoing investment before returns are forthcoming.

Emerging Demand in Target Sectors

There are two sectors well-suited to the Town of Johnson that are growing and expected to continue to grow in Vermont. These are: 1) agribusiness, food processing and technology; and 2) energy and environmental services. Agribusiness, food processing and technology includes: support activities for crop production; support activities for animal production; food processing and beverage manufacturing; agricultural chemical manufacturing; agricultural implement manufacturing; food product machinery manufacturing; farm and garden equipment merchant wholesalers; farm product raw material merchant wholesalers; and farm supplies merchant wholesalers. Energy and environmental services includes: suppliers of services, equipment and products which increase energy efficiency; as well as firms involved in providing access to and use of renewable energy (solar, wind, geothermal, hydropower, and biomass) sources through research and development, manufacturing and installation of renewable energy technologies. The environmental services sector also includes professionals, such as engineers, scientists and lawyers, who provide technical and scientific expertise for a wide variety of environmental issues such as energy, remediation and restoration.

These two sectors also prove to be well-suited to the Town of Johnson in terms of workforce development. Both sectors require a variety of potential workers at different levels, including entry level workers. One reason the Town of Johnson is interested in this potential light industrial/commercial park is as a mechanism to create jobs for local residents. As of the 2010 Census, the Town of Johnson had over 10% unemployment, with a mean household income of

$40,007 and a median household income of $27,808.[1] In addition, 62.8 % of residents earn less than $50,000.

Data shows that Vermont's agribusiness, food processing and technology and its energy and environmental services sectors are robust and expected to grow. As of 2010, Vermont had at least 457 food processing establishments that employed at least 4,356 people. Food processing is the second largest manufacturing sector in the state and is one of two manufacturing sectors that saw employment growth from 2007 to 2010 during an economic recession. [2] Recently, Vermont has had significant investments made in food processing facilities – including the Vermont Food Venture Center in Hardwick, and the Mad River Food Hub in Waitsfield – which are designed to work with food businesses at various stages of their life-cycle. The hope is that a business would grow out of that space and eventually need its own processing facility; this could be an opportunity for a Johnson light industrial/commercial park (with a possible focus on food processing) to provide expanded processing opportunities for growing food businesses.

In a 2009 survey of firms in Vermont's environmental sector, over half the responding firms expect to grow their environmental business over the next five years with only 5% expecting to shrink. Eighty-eight percent of firms in Vermont's environmental sector that export goods and services outside of Vermont expect to grow in the next five years.[3] In addition to demand from Vermont firms, we also explored potential demand by Canadian firms and concluded that Johnson is too far from the border and from the interstate to be attractive to Canadian companies. The location does not provide them with the ease of management and access to interstates that they prefer.

Focusing on the two target sectors may help fill lots by building strong relationships within sectors so that businesses recommend Johnson to other businesses in their sector over time.

What Johnson Has to Offer the Food Processing Sector

Johnson has many assets to offer the food processing sector. Municipal wastewater and water supply is crucial for many companies, as is Phase 3 power supply, internet connectivity, roads, loading docks and parking areas that are accommodating to trucks, and cell service. A high quality town water system for fire protection helps keep insurance rates low, which is particularly important for high inventory businesses. These are basic needs for most food sector businesses that Johnson can meet.

Johnson is in close proximity to tourism communities and four season resorts (such as Stowe and Jeffersonville), which can be important markets for food processors. Johnson has a vibrant farming and food community, including the Lamoille River Food Cooperative, with its interest in facilitating

---

[1] Selected Economic Characteristics. 2006-2010. American Community Survey 5 year estimates. U.S. Census Bureau.

[2] Farm to Plate Strategic Plan Executive Summary. Vermont Sustainable Jobs Fund. July 2011.

[3] Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities. Yellow Wood Associates and the Vermont Environmental Consortium. December 2009.

the development of local food enterprises. Johnson and surrounding communities have their own farmers markets. Route 15 is a significant route through Johnson providing access to the Champlain Valley region. In addition, Johnson is within a reasonable distance (30-40 miles) of I89 and about an hour from I91. Johnson is also in fairly close proximity to Canada, as well as regional distributors such as Squash Valley (in Waterbury) and Deep Root (in Johnson). Johnson is close to institutional markets such as Johnson State College and Copley Hospital.

As the agribusiness-focused industrial park in Hardwick continues to fill up, a Johnson light industrial/commercial park may be able to reap the benefits of spillover from that park. With agribusiness, food processing and technology as one of its focus areas, a Johnson park would be a logical choice after Hardwick.

The Town of Johnson has an entry level workforce ready for the agribusiness, food processing and technology sector. In addition to those current residents seeking job opportunities, there are also students graduating from Johnson State College and students gaining skills at the Green Mountain Technology and Career Center who are seeking job opportunities and are interested in staying in the area. Johnson State College and Green Mountain Technology and Career Center are two institutions that can provide educational and training opportunities and may be able to work with local companies to deliver the training required by this sector.

What Johnson Has to Offer the Energy and Environmental Services Sector

The energy and environmental services sector encompasses a wide range of businesses with varying needs. Energy and environmental consulting needs are generally limited to office space and telephone and internet connectivity. Installation and fabrication companies may have a central office, but often have a machine shop for product fabrication. Manufacturing products sometimes requires the use of specific parts that may come from vendors all over the country; as a result, convenient shipping is important. Other potential needs include signage, warehouse space for material storage, bulkhead doors for trucks, a lift gate, convenience to shipping services like UPS or FedEx, wide driveways and large parking lots able to accommodate trucks. Interstate access is important for some companies and not for others. Johnson can meet all of these needs. In addition, some businesses in the energy and environmental services sector want to produce their own energy on site. Allowing, and even incentivizing, flexibility in utility and energy use for energy companies may be useful in attracting businesses in this sector.

The Town of Johnson, in addition to the site infrastructure it wants to provide to the potential light industrial/commercial park site, has the Vermont Electric Cooperative located directly across Route 15 from the proposed site. Vermont Electric Cooperative (VEC) is a member-owned electric distribution utility established in 1938 to bring electricity to rural Vermonters. Today, VEC is Vermont's third largest electric utility serving consumers in 74 towns in northern Vermont and has a diversified energy portfolio. VEC has implemented some innovative programs, including Smart Meters, net metering, and voluntary renewable energy pricing. In the event the Johnson light industrial/commercial park is developed, VEC is interested in purchasing some space.

According to *Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities*, [4] the Vermont environmental sector workforce includes a mix of specialized and non-specialized workers.[5] "Although more than half of firms report that lack of access to specialized employees limits their growth, growing the sector will require a tiered labor force with high, middle and entry level skills."[6] Current Johnson residents are seeking job opportunities, many for entry level positions. There are also students graduating from Johnson State College and students gaining skills at the Green Mountain Technology and Career Center who are seeking job opportunities and are interested in staying in the area. Johnson State College and Green Mountain Technology and Career Center are two institutions that may be able to work with local companies to deliver the training required by this sector. "Clearly, there is work to do to improve workforce training opportunities and coordination between and among firms and education and training institutions in Vermont if our environmental business sector is to achieve its full potential."[7]

[4] Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities. Yellow Wood Associates and the Vermont Environmental Consortium. 2009.

[5] Fields that require the highest proportion of specialized workers include: environmental consulting, environmental regulation, and waste management. Environmental education, green products, and sustainable agriculture and forestry require the lowest proportion of specialized workers.

[6] Vermont's Environmental Sector, 2009, p i-ii.

[7] Vermont's Environmental Sector, 2009, p i-ii

Making a Decision

The Town of Johnson is required to make a decision regarding the option on the Jewett property. There are essentially two options moving forward, which are laid out with pros and cons below.

Option 1: Negotiate a better deal on the Jewett property option and purchase price and take the one year option.

From conversations with professionals in commercial real estate, the price for the option and the property are high. Realtors we spoke with felt that $10,000 per acre is what they would pay for undeveloped land and not more than $200,000 for this particular property. At $265,000 for 17 acres, the Jewett property will cost about $15,588 per acre. One commercial realtor thought the price for the option was similarly too high. The options he usually purchases on commercial properties are $1,000 for one year. The option on the Jewett property is $5,000 for one year. We believe the Town should negotiate for a lower option and purchase price. Given that commercial real estate contacts felt that both prices were too high, it is unlikely that the Jewett's would find a buyer at the price they are asking of the Town.

If the Town does end up purchasing the property, it has several options, including A) Selling the residential lots to cover carrying costs for the light industrial/commercial park; B) Developing the proposed light industrial/commercial park itself; C) Reselling it to a partner/developer; or D) Holding it until it can find a suitable owner and use for the property.

Pros – for taking the one year option:

1. The Town saves money from the original option asking price and property asking price.
2. The Town maintains its option to purchase going forward.
3. One year will give the Town more time to determine whether it is in their best interests to purchase the property. This time should be spent working to identify development partners, exploring financing and incentives, marketing to potential tenants in the two target sectors, considering what, if any, covenants or restrictions to place on the property before resale, and soliciting input from voters. We would only recommend the Town take the option if there is sufficient staff and/or volunteer time and commitment to actively pursue next steps over the next year including: identifying partners, considering covenants, and marketing the property to potential users. Paying for the option without being prepared to actively pursue next steps would not likely be money well spent.
4. Another year may make it clearer that the Town does not want to purchase the property to hold in the short or long term and is willing to forgo any control over how it is developed, beyond that already provided by Town regulations.

Pros – for purchasing the property:

1. If the Town purchases the property, it can choose to place covenants on the property that predispose it (or portions thereof) for light industrial/commercial use and restrict undesirable uses.[8]
2. The Town retains control over a significant parcel of property.
3. The carrying costs associated with this property will keep the Town focused on its development and staff will become more aware of development activities in the region and in the two target sectors and the roles Johnson might play.

Cons:

1. Negotiations may fail in which case the Town may have to pay more than the property is "worth" to continue to keep its options open.
2. The Town will incur carrying costs, likely for many years (unless it resells the property), as the property develops in increments. The current taxes on the property are approximately $2,150 per year.
3. Staff time will be needed to pursue next steps in the short and longer term.
4. Voter approval for the option and for the purchase of the property may be very difficult and potentially divisive.

Option 2: Do not take the option on the Jewett property

Pros:

1. The Town saves money in the short run.
2. The Town saves itself from voter dissatisfaction and a potentially divisive issue.
3. The Town saves itself from the burden of ownership and does not have to seek a partner or market the property or develop financing and incentives.
4. The Town does not have to allocate staff time to pursuing next steps.

Cons:

1. The Town loses control over a significant parcel of property within its boundaries.
2. The Town loses the opportunity to respond to emerging opportunities and to create new jobs and new tax revenues over time using this property.
3. The Town loses the opportunity to bring its supporting resources, including VEC, Johnson State College, LEDC, Lamoille Regional Planning Commission, into alignment around specific economic development opportunities related to the development of the property. This type of alignment could have positive spinoffs for the region as a whole over time.

This is not an easy choice for the Town to make, but it does have serious implications for how the Town wants to look and function in the future.

---

[8] It is possible for the Town to place restrictions on the property without ownership. This could be done as part of the development review process or as a negotiated condition of approval. More information could be obtained from the Vermont League of Cities and Towns.

Next Steps

If the Town decides to move forward with the option and the potential purchase of the property for a light industrial/commercial park, the next steps for Johnson include:

1. **Allocate sufficient staff time to moving this forward.** Ideally, in addition to staff, there will be one or more volunteer champions of the park willing to serve the Town and continue to pursue this opportunity.
2. **Put relevant incentives in place to attract tenants and partners.** Businesses with whom we spoke mentioned that incentives may be useful in attracting tenants. One possibility could include low interest financing through VEDA, as this was also mentioned as an issue for businesses in relocating or expanding. Another incentive could be the flexibility for businesses purchasing lots in the park to use alternative forms of energy.
3. **Identify partners in the effort.** Since the Town does not want to be in the real estate development business, it will need a partner to bring this park to fruition. Partners could include realtors, developers, economic development organizations, utilities, etc. Partners should be able to see their own self-interest as well as the Town's in the idea.
4. **Market the park and pursue potential anchor tenants.** This involves a marketing plan, project identity, marketing materials, and generation of leads. Potential tenants can be pursued by continuing discussions with those businesses who already have expressed interest, continuing discussions with sector experts in the state, and continuing to talk with economic development experts around Lamoille County and statewide. The spec sheet prepared by Yellow Wood can be used to market the property through the Town's website and with commercial realtors and the State.
5. **Park design.** It may be useful to lay out all the potential options for structuring the design of the project, with advantages and disadvantages. Does the Town want to sell all lots? Does the Town want to work with a developer partner to build one or more commercial buildings, in which small businesses could lease commercial office space, and then sell the remaining lots to larger companies? Does the Town want to work with a developer to build the residential lots to help finance the light industrial/commercial lots? This will allow the Town to earn some money to help finance the rest of the infrastructure improvements and mitigate some of the carrying costs required to fill the park. These are all questions the Town should consider, as they may help get the park moving faster.
6. **Financing.** Potential sources are federal, regional and state grants and loans. Partners may be able to help acquire certain types of financing. For example, LEDC, as a regional development commission, could help the Town to qualify for VEDA loans. The Town should consider all the sources outlined in the full report and begin to strategize about which sources make the most sense.

Looking Back and Looking Forward

The Town of Johnson has an opportunity now to take control of its future, by taking an option and potentially purchasing a 17-acre property for a light industrial/commercial park. The question is what the Town would like to see happening there 20 years from now.

Right now, Vermont, like the rest of the country, is in the middle of a significant economic recession. The Town of Johnson has an opportunity to embark on serious planning now for the future of its community before the economic expansion begins.

There have been several businesses that have left the Town of Johnson despite wishing to stay, like Rock Art Brewery and Butternut Mountain Farm, because there were no light industrial/commercial lots available for them. It is likely that there will continue to be businesses growing in Vermont and looking to expand that are already in or could be attracted to the Town of Johnson as the economy improves.

"The best time to plant a tree is twenty years ago. The second best time is now."

- Chinese Proverb

Introduction

The Town of Johnson has an option on a piece of land on which it would like to develop a light industrial/commercial park. This is the only undeveloped property of its size within the "business area" of the Town of Johnson. The Town has already engaged the services of an engineering firm to develop a site plan for the proposed site. Now, the Town would like to know whether demand exists for space in a Johnson light industrial/commercial park as currently designed, what amenities and infrastructure potential tenants demand, and, if sufficient demand exists, what next steps the Town of Johnson should be taking in bringing the light industrial/commercial park into being, including any possible changes in park design to address market demand.

Methodology

The first step in assessing demand for light industrial/commercial space in Johnson was an investigation of available industrial/commercial space in Lamoille County and surrounding counties and interviews with local economic development professionals experienced in park development and knowledgeable about local trends. At the same time, we developed a concise description of Johnson's park in the form of a "spec" sheet to share with businesses and other interviewees. Yellow Wood conducted research on trends in Vermont's industrial clusters at the national, regional, and state levels, and identified five clusters with potential for further investigation. In addition, we reviewed literature on industrial park development in rural settings and identified the key components, steps, and choices facing Johnson as a park developer. This material was included in an Interim Report, included here as Appendix D.

Once the interim report was completed, we met with the Selectboard and prioritized three sectors on which to focus the remainder of the work:

1. ***Agribusiness, food processing and technology.*** This cluster includes support activities for crop production; support activities for animal production; food processing and beverage manufacturing; agricultural chemical manufacturing; agricultural implement manufacturing; food product machinery manufacturing; farm and garden equipment merchant wholesalers; farm product raw material merchant wholesalers; farm supplies merchant wholesalers.
2. ***Energy and environmental services businesses***. This cluster includes suppliers of services, equipment and products which increase energy efficiency; as well as firms involved in providing access to and use of renewable energy (solar, wind, geothermal, hydropower, and biomass) sources through research and development, manufacturing and installation of renewable energy technologies. The environmental services sector includes professionals who provide technical and scientific expertise for a wide variety of environmental issues such as energy, remediation and restoration. This includes engineers, scientists and lawyers.
3. ***Biomedical/biotechnical***. This cluster includes pharmaceutical and medicine manufacturing; optical instrument and lens manufacturing; electro medical apparatus manufacturing; analytical laboratory instrument manufacturing; irradiation apparatus manufacturing; medical equipment and supplies manufacturing; medical equipment

merchant wholesalers; health and personal care stores; scientific research and development services; hazardous waste collection; hazardous waste treatment and disposal; and ambulatory health care services.

Agribusiness, Food Processing and Technology

National, Regional and Local Trends

Top trends in the food industry at a national level, as identified by Innova Market Insights, relate to purity, authenticity and sustainability. Despite ongoing economic uncertainty, consumers are seeking products with added value. Concerns over the quality and safety of food and demand for authenticity in terms of regional products has created a growing consumer interest in where foods come from and a growing demand for local or regional products.[9]

In Vermont, these trends also hold true.[10] Based on 2008 data, Vermont's sustainable food system cluster employed 30,499 workers in more than 9,366 establishments. That total, superimposed on the "Competitive Benchmarking of the Vermont Economy" conducted for the National Governors' Association (NGA) in 2007, would place it first among the state's clusters – well above the sum of the two food-related clusters in the NGA report, "perishable processed foods and non-perishable processed foods" (4,391 employed). Moreover, the majority of farms in Vermont are mainly family-operated businesses or owned solely by an individual, and most of these were not included in the NGA or US Department of Commerce analyses. Further, family and individual-owned farms in the state have grown by more than 2% over the past 5 years—although farming is often not the owner's primary occupation. Direct sales to consumers through farmers' markets and community-supported agriculture (CSA), local contracts with restaurants, stores or institutions and sales on site have been rising steadily, from $3.8 million in 1982 to $9.6 million in 2002 to $22.9 million in 2007. One of every 2.2 in the cluster is a self-employed farmer or freelancer in the value chain, a population overlooked by most cluster studies.[11]

The Vermont Farm to Plate (F2P) Initiative, which was approved by the state legislature in 2009, explores Vermont's food and agriculture sector in depth and has developed a 10-year strategic plan to strengthen the state's food system. The F2P plan estimates that a 5% increase in farming and food manufacturing in Vermont would generate $135 million in annual output. "When the multiplier effect is considered, total output would increase by an average of $177 million per year from 2011 to

---

[9] Erikson, Erin. Innova Market Insights Announces Top 10 Food Trends for 2012. FoodProcessing.com. November 23, 2011. http://www.foodprocessing.com/industrynews/2011/innova-top10-food-trends-2012.html.

[10] Farm to Plate Strategic Plan Executive Summary. Vermont Sustainable Jobs Fund. July 2011. http://www.vsjf.org/assets/files/Agriculture/Strat_Plan/F2P%20Executive%20Summary_6.27.11_Small%20File.pdf Pg. 6.

[11] Rosenfeld, Stuart. Sustainable Food Systems Cluster, Vermont Style. 2009. http://rtsinc.org/publications/documents/VermontPlanningStudiesArticle.pdf

2020. A 5% increase in production would also boost total food system employment by an average of 1,500 jobs over the 10-year period."[12]

Food processing is the second largest manufacturing sector in Vermont and is one of two manufacturing sectors that saw employment growth from 2007 to 2010. [13] "Vermont's food processing and manufacturing industry includes 71 on- and off-farm dairy processors (Vermont dairy farms belong to one of six dairy co-ops), 49 on- and off-farm licensed cheese makers, 61 slaughterhouses and meat processing facilities, at least 21 breweries, 27 wineries, and 47 commercial bakeries. A few small-scale facilities exist for products such as organic canola and sunflower cooking oil, vodka and mead, and yarn and carded wool. These tallies do not capture the other businesses that support food manufacturing activities (e.g., machinery and equipment) and create a significant economic multiplier effect."[14]

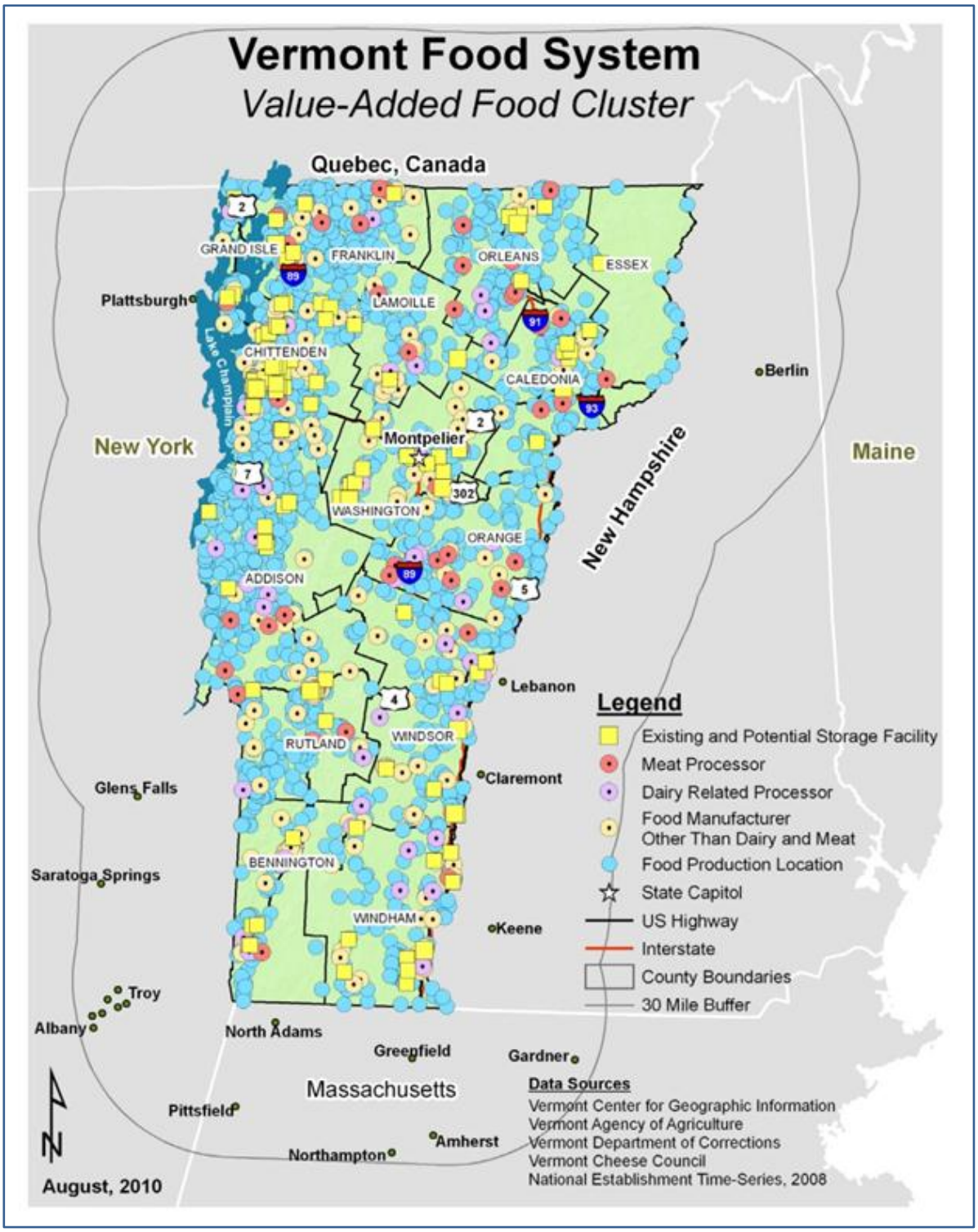
[12] Farm to Plate Strategic Plan Executive Summary. Pg. 4.

[13] Farm to Plate Strategic Plan Executive Summary.

[14] Farm to Plate Strategic Plan. Chapter 3.4 Food Processing and Manufacturing. Vermont Sustainable Jobs Fund. 2011. http://www.vsjf.org/assets/files/Agriculture/Strat_Plan/3.4_Food%20Processing.pdf. Pg. 3.

As the map in Figure 1 indicates, there is already a base of food production in and around the Town of Johnson, Lamoille County and surrounding counties on which to build.

Figure 1: Vermont Food System, Value-Added Food Cluster



From: Vermont Sustainable Jobs Fund. Farm to Plate Strategic Plan. 2011.
http://www.vsjf.org/assets/files/tables_figures/processing/Figure%203.4.1.jpg

The F2P research process showed a high level of interest in expanding Vermont's processing capacity. Expanded in-state processing capacity "can allow producers to expand their product lines, gain greater control over the process of bringing food to market, and capitalize on local branding as well as other certifications based on processing procedures, such as organic, humane slaughter, or a form of the Vermont Seal of Quality."[15]

Although there are many benefits to in-state processing facilities, the F2P research also showed that many consumers underestimate the challenges of developing viable processing businesses in the state. There are many different types of facilities, but a number of common business issues have been identified in the F2P research, including:[16]

- The most cost effective and profitable ways to manage surplus volume.
- The level of customer demand for a given processed product.
- The level of competition with other farmers vying for the same local customers.
- Proximity to off-farm processing facilities.
- Available labor for on-farm processing.
- Access to year-round local food outlets.
- The level of additional regulatory compliance required for processing and the costs associated with that compliance.
- The existence of partnership opportunities with specialty food processors.
- The ability to manage multiple steps along the value chain, from the farm to the processing facility, and from branding and marketing product lines to reaching the consumer.

These challenges and barriers to growth will affect the extent to which the food sector in Vermont can continue to grow. Additional challenges that are specific to the food industry include specific workforce needs or training and specialized infrastructure and space needs.

Workforce Needs

In order to support the expansion of the food sector, there must be a ready workforce to fill the development needs of sector businesses. There are labor shortages and gaps in the Vermont food sector; producers report difficulty finding labor for both harvesting (in the case of produce seconds) and processing. Often, the additional labor demands also extend to distribution and marketing for new products.

The dairy industry faces a shortage of labor that is reported as the primary barrier to expansion. "The meat industry faces particular challenges in finding, and retaining, appropriately trained workers for quality butchering. This lack of butchering capacity is a major factor behind current bottlenecks in meat processing."[17] Labor shortages are felt in the fruit industry as well. "The mobile quick freeze unit pilot project made low-cost equipment available for freezing small volumes of

[15] Farm to Plate Strategic Plan. Chapter 3.4 Food Processing and Manufacturing. Pg. 30.
[16] Farm to Plate Strategic Plan. Chapter 3.4 Food Processing and Manufacturing. Pg. 30.
[17] Farm to Plate Strategic Plan. Chapter 3.4 Food Processing and Manufacturing. Pg. 30.

berries, but producers did not have the labor needed to pick those berries for a day or two of freezing time. Almost every type of processing expansion comes with labor challenges."[18]

The Town of Johnson desires to employ local people in a light industrial/commercial park. The workforce needs of this sector may be good match for the supply of labor available in and around Johnson. Of the current jobseekers in the Morristown-Stowe Labor Market Area (which includes Johnson), the breakdown by highest grade completed is below. Over 82% of jobseekers in the region do not have a bachelor's degree.[19]

Table 1: Morristown-Stowe Labor Market Area, Jobseekers by Highest Grade Completed

Grade Level Completed	Number	Percent
No grade completed	6	1.2
Grade 1-12, but no diploma	63	12.8
High school graduate or equivalent	234	47.4
1-3 years college or technical school	105	21.3
Bachelor's degree or equivalent	49	9.9
Education beyond Bachelor's degree	27	5.5
Not available	10	2.0

The Lamoille Valley Workforce Investment Board (which also includes Johnson) has similar data and over 84% of jobseekers do not have a bachelor's degree.

Table 2: Lamoille Valley Workforce Investment Board, Jobseekers by Highest Grade Completed

Grade Level Completed	Number	Percent
No grade completed	8	0.6
Grade 1-12, but no diploma	225	16.6
High school graduate or equivalent	655	48.2
1-3 years college or technical school	257	18.9
Bachelor's degree or equivalent	120	8.8
Education beyond Bachelor's degree	65	4.8
Not available	29	2.1

In addition to those current residents seeking job opportunities, there are also students graduating from Johnson State College and students gaining skills at the Green Mountain Technology and Career Center who are seeking job opportunities and are interested in staying in the area. Johnson State College and Green Mountain Technology and Career Center are two institutions that can

[18] Farm to Plate Strategic Plan. Chapter 3.4 Food Processing and Manufacturing. Pg. 32.
[19] Economic and Labor Market Information. Labor Exchange Information. Vermont Department of Labor.

provide educational and training opportunities and may be able to work with local companies to deliver the training required by this sector.

Space and Infrastructure Needs

Conversations with local and regional food sector businesses illustrated that needs for space and infrastructure can vary greatly between subsectors, but there are also common themes.

Some of the varying needs identified include: processing equipment, freezers, storage space, efficient distribution methods, and diverse types of retail outlets.[20] Municipal wastewater and water supply is crucial for many companies, as is Phase 3 power supply, internet connectivity, roads, loading docks and parking areas that are accommodating to trucks, and cell service.

There are a variety of other characteristics of food sector businesses that may have implications for space and infrastructure needs. For example, many food sector firms require trucking to ship their products. New England and Vermont are net importing states, so the trucks that are arriving from the west coast and other areas are looking for loads going back west. There is a lot of excess freight capacity going outbound from Vermont. Many larger trucking companies will be able to conveniently stop in Johnson after Derby or Newport. For some companies, though, being closer to the interstate or an airport than they would be in Johnson is important for shipping needs.

Retail sales are a crucial part of many food sector companies, and a large percentage of retail sales happen online. For some companies, the percentage of online retail sales can be as high as 80%. As a result, internet connectivity is crucial for those food businesses serious about online marketing.

Many food sector businesses are deeply connected to the location from which their product originates. Sometimes the actual product is unique because of the natural characteristics of its location, which can make relocation difficult. For example, the water supply for a particular Lamoille County distillery is a key element to their product, and changing locations would change the quality and character of that product.

Recently, Vermont has had significant investments made in food processing facilities – including the Vermont Food Venture Center in Hardwick, and the Mad River Food Hub in Waitsfield. These facilities are designed to work with food businesses at various stages of their life-cycle. The hope is that a business would grow out of that space and eventually need its own processing facility. Although both facilities are quite new, and have not reached full capacity, over the long term it is expected that demand for additional processing will grow. This could be an opportunity for Johnson to provide expanded processing opportunities for a growing food business.

Sometimes on-farm production infrastructure can become stranded if the farm is transitioned out of a family. This is what led Butternut Mountain Farm, formerly of Johnson, to seek independent production facilities. They found a suitable lot in Morrisville and have since expanded to a second lot. Butternut Mountain owns a 41,000 square foot building on one lot, and now leases another

[20] Farm to Plate Strategic Plan. Chapter 3.4 Food Processing and Manufacturing. Pg. 32.

17,000 square foot building. Attributes that make their location work for their business include having an easily buildable lot, a high quality town water system for processing and fire protection (this helps keep insurance rates low, which is particularly important for a high inventory business), and easy access for trucking, as they have 10-12 trucks coming in and out of the site each day.

Different types of food businesses also have different levels of liability and regulations, which may necessitate different infrastructure configurations. The maple industry, for example, has different regulations than other agricultural products. Companies producing alcoholic beverages may need to pay the federal government a certain amount of money based on their locations and product inventory. Having multiple buildings or locations can raise business costs, as every facility needs to be bonded.

Many food businesses in Vermont rely heavily on tourism for business. Having a visually pleasing stand-alone building in an accessible location is desirable to attract tourists. For some, it is important to have all aspects of the business in one building so that people can get a tour of the facility, but employees are still available for other business needs.

The difference between owning and leasing space may also have implications for food businesses seeking a new location since ownership requires more financing, which is often a challenge for businesses. In addition, the decision of location may hinge on finding skilled employees. Johnson State College may be a draw for some employers who are seeking interns or entry-level employees. A workforce with engineering skills is becoming a need for some companies in the food industry. While Johnson State College does not offer engineering opportunities, the Green Mountain Tech and Career Center may be an option to pursue in terms of offering training for industry needs.

What Johnson Has to Offer the Food Processing Sector

Johnson has many assets to offer the food processing sector. In addition to the available infrastructure that will be provided to the Jewett property site, Johnson is in close proximity to tourism communities and four season resorts (such as Stowe and Jeffersonville). Johnson has a vibrant farming and food community, including the Lamoille River Food Cooperative, with its interest in facilitating the development of local food enterprises. Johnson and surrounding communities have their own farmers markets. Route 15 is a significant route through Johnson providing access to the Champlain Valley region. In addition, Johnson is within a reasonable distance (30-40 miles) of I89 and about an hour from I91. Johnson is also in fairly close proximity to Canada, as well as regional distributors such as Squash Valley (in Waterbury) and Deep Root (in Johnson). Johnson is also in close proximity to institutional markets such as Johnson State College and Copley Hospital. Johnson State College and Green Mountain Technology and Career Center are two institutions that can provide educational and training opportunities.

As the agribusiness-focused industrial park in Hardwick continues to fill up, a Johnson light industrial/commercial park may be able to reap the benefits of spillover from that park. With agribusiness, food processing and technology as one of its focus areas, a Johnson park would be a logical choice after Hardwick.

Energy and Environmental Services

The environmental sector is made up of a wide range of sub-sectors that engage in activities that decrease the use of fossil fuels, promote sustainability, and protect our natural resources. The environmental sector includes a diverse group of businesses, non-profits, and government agencies doing work in sub-sectors that include: Energy Efficiency; Environmental Consulting; Environmental Education; Environmental Regulation; Green Building Services and Products; Green Financing; Green Products; Renewable Energy; Smart Growth; Sustainable Agriculture and Sustainable Forestry; and Waste Management.[21]

The clean energy economy is an emerging part of the environmental sector with broad opportunities for growth and the potential to create jobs with a variety of skill sets and levels. The Pew Charitable Trust, in a 2009 report, developed the following description of the clean energy economy: "A clean energy economy generates jobs, businesses and investments while expanding clean energy production, increasing energy efficiency, reducing greenhouse gas emissions, waste and pollution, and conserving water and other natural resources. The clean energy economy comprises five categories: (1) Clean Energy; (2) Energy Efficiency; (3) Environmentally Friendly Production; (4) Conservation and Pollution Mitigation; and (5) Training and Support." [22]

Within the clean energy economy, the concept of clean technology has evolved. Clean technology or 'clean tech', which is also referred to as 'greentech,' is an umbrella term that refers to the development of technologies that support energy that is more environmentally friendly, efficient, and competitively priced. Examples of clean tech include renewable energy, energy storage, energy efficiency, and improvements to transportation, industry practices, and the environment.

Trends

At a national and international level, the clean energy economy is growing. "Clean tech isn't withering on the vine as some would proclaim, but instead is continuing its rapid expansion, witnessed by the growth of green buildings, smart meters, hybrid electric vehicles, distributed and centralized renewables, LED lighting, and a host of other clean-tech breakthroughs that are becoming increasingly ubiquitous."[23] The U.S. clean tech industry has continued to expand, despite the low-cost manufacturing in China and the downturn in the economy through the last several years. "Combined global revenue for solar PV, wind power, and biofuels, for example, surged by 31 percent over the prior year, growing from $188.1 billion in 2010 to $246.1 billion in 2011. The bulk of this expansion came from double-digit growth rates for both wind and solar deployment, along with an increase in pricing for biofuels."[24] The market for biofuels, wind power, and solar

---

[21] Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities. Yellow Wood Associates and the Vermont Environmental Consortium. December 2009.

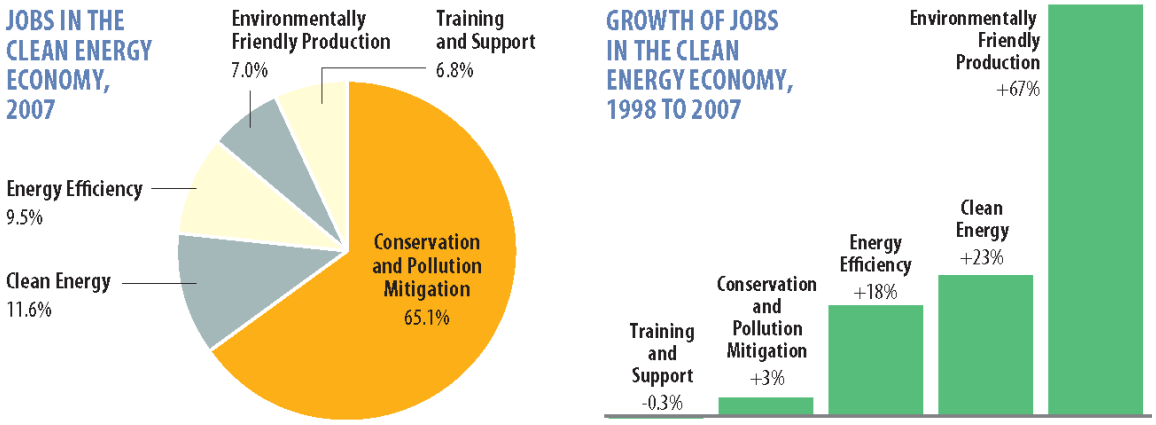
[22] The Clean Energy Economy: Repowering Jobs, Businesses, and Investments Across America. The Pew Charitable Trust. June 2009. p. 11

[23] Pernick, Ron, Wilder, Clint, and Winnie, Trevor. Clean Energy Trends 2012. March 2012. Clean Edge. p. 3

[24] Pernick, Wilder, & Winnie, 2012, p. 3

photovoltaic (solar PV) is expected to continue to expand through the coming decade. Figure 2 shows the breakdown of jobs and growth of jobs in this sector.

Figure 2: Jobs and Growth of Jobs in the Clean Energy Economy



SOURCE: Pew Charitable Trusts, 2009, based on the National Establishment Time Series Database; analysis by Pew Center on the States and Collaborative Economics.

Clean Edge, a research and advisory firm devoted to the clean tech sector, projects that in less than a decade in 13 states, including Vermont and many New England states, solar PV will be cost-competitive at the residential level without any subsidies and solar will become increasingly attractive. Wind power is increasingly becoming more competitive with the cost of fossil fuel generated electricity, with new wind farms producing electricity in the range of 5-8 cents per kWh.[25]

Clean Edge's second annual U.S. Clean Energy Leadership Index lists Vermont at tenth place when compared to all 50 states in the clean energy spectrum. Within the renewable energy sector, Vermont had 23 companies and 414 employed directly or indirectly in 2009 and is a leader in wood energy. The McNeil Generating Station was constructed in 1984 and at the time was the world's largest wood-burning facility. In 2010, there were 24 fuel dealers/suppliers that offered biodiesel or bioheat in Vermont.[26] "Vermont's greatest potential for renewable energy development lies in its biomass sector. With almost 78% of the state covered in forests, Vermont has a strong potential to be a leader in wood-based energy. It is also poised to become a major player in the ethanol industry as cellulosic-based technologies emerge that expand the use of forest resources. In 2009, Vermont became the first state to enact a state-wide "feed-in tariff"-style legislation for renewable energy."[27]

Vermont is also making gains in the green building and energy efficiency sector. The American Council for an Energy Efficient Economy listed Vermont fifth in the nation in the 2010 State Energy Efficiency Scorecard. There are a growing number of LEED certified buildings in Vermont. Vermont will lead the nation in the deployment of the first state-wide smart meter program, which is slated to be functioning by 2013.[28]

---

[25] Pernick, Wilder, & Winnie, 2012

[26] de Morsella, Chris. Find Out Where the Green Job Are in Vermont. The Green Economy Post. http://greeneconomypost.com/green-resource-center/green-jobs-careers/find-green-jobs-state/find-green-jobs-vermont.

[27] Renewable Energy in Vermont. American Council on Renewable Energy (ACORE). February 2011.

[28] de Morsella.

Figure 3: Environmental Sector Sub-sectors

Environmental Sector Sub-sectors

The **Energy Efficiency** sub-sector includes suppliers of services, equipment and products which increase energy efficiency.
The **Environmental Consulting** sub-sector encompasses professionals who provide technical and scientific expertise for a wide range of environmental issues such as energy, remediation and restoration. This sub-sector includes, but is not limited to, engineers, scientists, and lawyers.
The **Environmental Education** sub-sector includes organizations and institutions providing environmental education and skills training for the environmental sector.
The **Environmental Regulation** sub-sector includes public and private organizations engaged in environmental regulation and regulatory compliance.
The **Green Building Services and Products** sub-sector includes architects, engineers, contractors, sub-contractors and other professionals associated with the construction of new green buildings and the retrofitting of existing buildings, as well as manufacturers and purveyors of green building products and materials.
The **Green Financing** sub-sector includes innovative financing services such as energy efficient mortgages, carbon offsets, renewable energy credits, alternative energy venture capital and interest rate reductions and incentives for efficiency and renewable energy projects.
The **Green Products** sub-sector includes manufacturers and purveyors of environmentally friendly products not specific to green building.
The **Renewable Energy** sub-sector includes firms involved in providing access to and use of renewable energy (solar, wind, geothermal, hydropower and biomass) sources through research and development, manufacturing and installation of renewable energy technologies.
The **Smart Growth** sub-sector includes firms and organizations that work to promote land use and development planning that support the environmental well-being of Vermont's communities and landscapes, including land conservation.
The **Sustainable Agriculture & Sustainable Forestry** sub-sector includes firms and organizations that have third party certification and are working to promote and practice sustainable land use practices in the areas of agriculture and forestry, including organic farming and FSC certified forestry operations.
The **Waste Management** sub-sector provides waste management services and materials in the areas of recycling, living systems, solid waste, wastewater, and other innovative waste management technologies.

From: Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities. pg 8.

In 2009 Yellow Wood conducted surveys for the Vermont Environmental Consortium to establish the conditions with respect to environmental business education and training needs and the opportunities and resources available in Vermont. Some key findings from that study are:

- Of responding firms, nearly 19,500 people are directly employed in Vermont's environmental sector.
- 80% percent of all firms considered their firms to be a part of more than one sub-sector. On average, firms reported being a part of 3.6 subsectors. (See list of subsectors on previous page.)
- While the majority of firms have fewer than four employees, 13% of firms reported more than 100 employees.
- Forty percent of firms earn less than $250,000 in annual revenue while 12% report annual revenue of $2 million or more.
- Firms in the environmental consulting sub-sector make up the biggest proportion of firms exporting goods or services outside of Vermont (and the US) - 65% of firms in this sub-sector export outside of Vermont and 25% export outside of the United States. Other sub-sectors in which more than half of responding firms export outside Vermont, but within the U.S., include green building, green financing, green products, renewable energy, sustainable agriculture and forestry, and waste management. The sustainable agriculture and forestry sub-sector has the highest percentage of firms exporting outside the U.S.
- More than half of the firms in the environmental sector expect to grow in the next five years with only 5% expecting to shrink in that same time period. The green products sub-sector had the highest expectation of growth while the environmental regulation sub-sector had the highest expectation of shrinking.
- 60% of firms provide goods or services outside of Vermont and close to 20% of firms provide goods or services outside of the United States.
- Over half the responding firms expect to grow their environmental business over the next five years with only 5% expecting to shrink.
- Eighty-eight percent of firms that export goods and services outside of Vermont expect to grow in the next five years.[29] The Town of Johnson has an interest in export industries that may bring new dollars into the community. A focus on the energy and environmental services sector may be a good way to pursue this goal.

Vermont economic development efforts have been very focused on the green industry sector over the past several years, in efforts such as the Vermont Environmental Consortium "Green Valley" concept. Since 2003, the state has had a biofuels initiative, primarily focused on the development of biodiesel. Vermont's renewable energy sector has close connections to its agricultural sector.

[29] Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities. Yellow Wood Associates and the Vermont Environmental Consortium. December 2009.

Workforce Needs

The 2009 Vermont Environmental Sector report also outlined the workforce needs of the environmental sector. The Vermont environmental sector workforce includes a mix of specialized and non-specialized workers. Fields that require the highest proportion of specialized workers include: environmental consulting, environmental regulation, and waste management. Environmental education, green products, and sustainable agriculture and forestry require the lowest proportion of specialized workers. "Although more than half of firms report that lack of access to specialized employees limits their growth, growing the sector will require a tiered labor force with high, middle and entry level skills. Currently, nearly one out of every five firms report difficulty filling project manager positions and one out of six can't find qualified field technicians."[30] Of firms that reported having difficulty filling positions, nearly two-thirds identified industry-specific skills (e.g. HVAC systems design, CNC machining) as requirements for jobs they are unable to fill. A lack of access to support services, information technology services, and broadband technology are barriers to growth for environment firms in Vermont.[31]

Current Johnson residents are seeking job opportunities, many for entry level positions. There are also students graduating from Johnson State College and students gaining skills at the Green Mountain Technology and Career Center who are seeking job opportunities and are interested in staying in the area. Johnson State College and Green Mountain Technology and Career Center are two institutions that may be able to work with local companies to deliver the training required by this sector.

Over one-third of firms indicated there was training that would be useful to them that they have not been able to find in Vermont, although many of these services are being provided by or to other Vermont firms. This suggests a significant need for improved information and communication about training opportunities. "Clearly, there is work to do to improve workforce training opportunities and coordination between and among firms and education and training institutions in Vermont if our environmental business sector is to achieve its full potential."[32]

[30] Vermont's Environmental Sector, 2009, p i-ii.
[31] Vermont's Environmental Sector, 2009.
[32] Vermont's Environmental Sector, 2009, p i-ii

Table 3: Growth Potential by Sub-Sector.[33]

This table identifies the percentage of firms in each sub-sector which export goods or services and the percentage which expect to Grow, Stay the same or Shrink in the next five years.

	Export Outside VT	Export Outside US	Expect to Grow	Expect to Stay the Same	Expect to Shrink
Energy Efficiency	50%	14%	67%	28%	6%
Environmental Consulting	65%	25%	65%	32%	3%
Environmental Education	47%	19%	54%	38%	9%
Environmental Regulation	47%	22%	38%	53%	10%
Green Building	58%	24%	66%	28%	7%
Green Financing	61%	18%	63%	29%	8%
Green Products	59%	21%	72%	26%	2%
Renewable Energy	59%	23%	68%	24%	9%
Smart Growth	53%	15%	49%	43%	8%
Sustainable Agriculture + Forestry	58%	29%	50%	39%	11%

[33] Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities. Yellow Wood Associates and the Vermont Environmental Consortium. December 2009.

Space and Infrastructure Needs

The energy and environmental services sector encompasses a wide range of businesses with varying needs. Consulting firms may have very different needs than renewable energy installation and fabrication companies. Energy and environmental consulting needs are generally limited to office space and telephone and Internet connectivity. Many small consultancies are based out of individual homes. Installation and fabrication companies may have a central office, but often have a machine shop for product fabrication. Manufacturing products sometimes requires the use of specific parts that may come from vendors all over the country; as a result, convenient shipping is important. One company that is currently based in the Burlington area cited a centrally located and easy to access location as being important for their customers, who are farmers based throughout Vermont. Another company looks for branch office locations that are centrally located within a town, generally on the main street. The location of current employees would be important to consider in relocation for many businesses in Vermont.

In considering relocation options, businesses often consider issues of zoning. Other potential needs include signage, warehouse space for material storage, bulkhead doors for trucks, a lift gate, convenience to shipping services like UPS or FedEx, wide driveways and large parking lots able to accommodate trucks. Interstate access is important for some companies and not for others. Many homegrown companies hope to remain in their home community.

Some businesses may prefer to lease space until the business can grow to a viable size enabling purchase. One company discussed the costs of relocating and wondered about incentivizing relocation through tax incentives or affordable rental rates, or even a free moving service.

One energy company that is currently located in an industrial park heats their building with their own product - solar panels - which is unique to their building. Allowing flexibility in utility and energy use for energy companies may be useful if Johnson moves forward with purchase and planning. Ken Horseman of the Vermont Department of Economic Development thought that an industrial park focused on providing low cost green energy might be a way to attract businesses; according to Horseman[34], there are no such parks in Vermont at this time. North Springfield is in the permitting stages for a $25 million biomass plant that will generate electricity and heat for park tenants.

Bourne's Energy, The Solar Specialists, AEF Consulting, and Sterling Staff Management LLC are interested in being contacted if the Town of Johnson goes through with the purchase and planning of the light industrial/ commercial park. Contact information for each of these companies is provided in Appendix A.

[34] Email communication with Ken Horseman, Vermont Department of Economic Development. June 29, 2012.

What Johnson Has to Offer the Energy and Environmental Services Sector

The Town of Johnson, in addition to the site infrastructure it wants to provide to the potential light industrial/commercial park site, has the Vermont Electric Cooperative located directly across Route 15 from the proposed site. Vermont Electric Cooperative (VEC) is a member-owned electric distribution utility established in 1938 to bring electricity to rural Vermonters. Today, VEC is Vermont's third largest electric utility serving consumers in 74 towns in northern Vermont and has a diversified energy portfolio. VEC has implemented some innovative programs, including Smart Meters, net metering, and voluntary renewable energy pricing.

Vermont Electric Cooperative is also an important component of the economic development efforts in the communities it serves. In VEC's service area, there are rural communities that are highly dependent on a few employers that help keep their local economies alive. VEC helps support those employers by offering some of the most competitive Commercial and Industrial rates in the State, and also supporting other economic development initiatives, such as:

- Business recruitment and retention
- Site location services
- Easements and permitting
- Long-range planning
- Rate analysis
- Specialized tariffs
- Telecommunications infrastructure

Vermont Electric Cooperative works closely with the Vermont Economic Development Authority (VEDA), Efficiency Vermont (EVT) and local and Regional Planning entities to help Vermont be technically and financially competitive.

In the event the Johnson light industrial/commercial park is developed, VEC is interested in purchasing some space.

Biomedical/Biotechnical

Trends

The biomedical/biotechnical sector creates products and services through the application of science and knowledge about the ways plants, animals and humans function. These products and services are then commercialized for a growing world market. This industry is defined as including the following four subsectors:

1. Agriculture feedstock.
2. Drugs and pharmaceuticals.
3. Medical devices and equipment.
4. Research, testing and medical laboratories.

There is also a convergence between biology applications and technology, such as bio-information, contract research and manufacturing, nanotechnologies, green energy and products (biofuels, forest biosciences, plastics) and nutraceuticals.

Jobs and salaries in this industry have grown substantially in the past 10 years. There are more than 47,000 bioscience companies and 1.4 million workers in the United States. The industry has grown an average of 3-5 percent per year over the past decade. Salaries in this sector are also higher, on average more than $77,000 per year, significantly higher than the national average of over $45,000 for all private industries in the U.S. in 2009. [35]

In Vermont, the biomedical/biotechnical sector is growing. The largest bioscience subsector in Vermont is medical devices and equipment (799 jobs). The state's $107 million in academic bioscience research expenditures in 2006 represented a very high share (88 percent) of total academic research. Over the past six years, $10 million in venture capital was invested in biosciences, split among human biotechnology and medical/health services. The 135 bioscience patents in the past six years were diversified, led by surgical and medical instruments, drugs and pharmaceuticals, and biochemistry.

The University of Vermont (UVM) has become very active in technology transfer and commercialization, spinning out a number of companies, many in the biomedical field. UVM Ventures, which is an arm of the University's tech transfer office, provides early-stage capital through its Pre-Seed Capital Fund and its Innovations Fund. The Pre-Seed Capital Fund makes awards of between $10,000 and $20,000 to UVM faculty, researchers, and students to develop prototypes or preliminary business plans. The Innovations Fund facilitates final validation of

[35] Pellerito, Peter. How to Grow Jobs Through Biotech Industry Development. 2011. http://www.bio.org/articles/how-grow-jobs-through-biotech-industry-development-0

prototypes and other proof-of-principle work. Innovation awards are in the range of $20,000 to $200,000. [36]

Table 4: Bioscience Industry: VT vs. US[37]

Bioscience Industry Base, 2006

Industry Subsector	Vermont		United States	
	2006	2001–06 Change	2006	2001–06 Change
Agricultural Feedstock & Chemicals				
Establishments	3	10.0%	2,183	3.8%
Employment	5	-73.3%	105,846	-6.1%
Location Quotient	0.02		n.a.	
Direct-Effect Employment Multiplier	2.26		11.22	
Total Employment Impact	12		1,214,709	
Average Annual Wage	$22,530		$67,870	
Drugs & Pharmaceuticals				
Establishments	4	7.5%	2,654	1.9%
Employment	39	35.3%	317,149	4.0%
Location Quotient	0.06		n.a.	
Direct-Effect Employment Multiplier	2.77		9.92	
Total Employment Impact	109		2,880,242	
Average Annual Wage	$53,754		$86,892	
Medical Devices & Equipment				
Establishments	38	21.0%	15,215	0.3%
Employment	799	90.5%	422,993	-0.9%
Location Quotient	0.85		n.a.	
Direct-Effect Employment Multiplier	2.31		4.85	
Total Employment Impact	1,845		1,980,128	
Average Annual Wage	$50,162		$59,441	
Research, Testing, & Medical Laboratories				
Establishments	41	49.6%	22,857	32.7%
Employment	250	78.3%	449,991	17.8%
Location Quotient	0.25		n.a.	
Direct-Effect Employment Multiplier	1.86		3.25	
Total Employment Impact	464		1,440,500	
Average Annual Wage	$50,749		$71,284	
Total Private Sector				
Establishments	22,964	2.0%	8,575,730	10.2%
Employment	251,368	0.6%	113,463,842	3.1%
Average Annual Wage	$34,943		$42,272	

Note: n.a. = metric is not applicable.

[36] Technology, Capital and Talent: State Biosciences Initiatives 2008. Vermont Biosciences Alliance. 2008. http://vtbiosciences.org/wp-content/uploads/VT_BIO_08.pdf

[37] Ibid.

Workforce Needs

Employment data shows that bioscience firms and research provide nearly 1,100 direct jobs in Vermont, and another 3,000 indirect jobs with job growth of seven times the annual rate in the Vermont economy as a whole. Job growth is estimated to be 7% in the sector of over 90 companies.

Based on the table on the previous page, there is significant growth in establishments (7.5 to nearly 50%) in all subsectors of the biomedical sector, with significant growth in employment in research, testing and medical laboratories (78.3%); medical devices and equipment (90.5%); and drugs and pharmaceuticals (35.3%).

Much is made of the importance of science, technology, engineering and mathematics (STEM) in relation to education at all levels. In the area of biosciences, though, these skills are particularly important. Bioscience workers need to conduct research, translate innovative ideas into product development and improved techniques, and manufacture new products. National data on life sciences achievement show that only 52% of 12th graders are at or above a basic level of achievement in the sciences. Despite this weak achievement, there are states that stand out as performing considerably better than others. Vermont, for example, is a member of the group of states that are considered the leaders (which also includes Connecticut, Massachusetts, Minnesota, New Hampshire, New Jersey, Ohio and Wisconsin).[38] On May 10, 2012, the National Assessment of Educational Progress (NAEP) released the statewide performance results from the 2011 assessment in science for grade 8 students; the results show that Vermont's scores are significantly higher than the same group at the national level. [39]

There are several organizations in Vermont working toward improving the environment for technology companies, including the Vermont Technology Council (VTC), which has promoted strategies for creating an environment conducive to commercialization of products and services and the growth of technology companies. VTC recognizes the importance of Vermont colleges and universities to turning science and engineering innovations into viable business opportunities. The University of Vermont (UVM) has increased its commitment to its technology transfer program, which has had increasing numbers of patents and spinoff companies resulting from the innovative research happening there. UVM also supports its Ventures program, which offers grants to provide entrepreneurial faculty and staff with financial support for early stage development, and the Vermont Center for Emerging Technologies, its on-campus technology business incubator.

---

[38] Taking the Pulse of Bioscience Education in America: A State by State Analysis. Battelle Technology Partnership Practice. 2009. http://www.battelle.org/ASSETS/355747F27D534BFB91A51767F359BA0A/BioEd_09Summary_report.pdf

[39] Vermont eighth-grade students above national average in science. Vermont Business Magazine. 2012. http://vermontbiz.com/news/may/vermont-eighth-grade-students-above-national-average-science?utm_source=VBM+Mailing+List&utm_campaign=22ae43061f-Enews_5_10_20125_10_2012&utm_medium=email

Space and Infrastructure Needs

From our conversations with biomedical/biotechnical firms in Vermont, it is clear that these firms have needs related to transportation, proximity to colleges and universities, as well as proximity to hospitals and medical centers. Firm contacts explained that it is important for them to be in fairly close proximity to interstate highways (like I89) and airports, as their products are marketed and sold around the United States and around the world. Many products destined for international buyers are sent on airplanes out of Burlington International Airport. One contact mentioned that Johnson's distance from Burlington International Airport was not too far to be manageable.

Proximity to colleges and universities is important for a number of reasons. First, biotechnical firms often work in partnership with local universities, such as the University of Vermont, through engineering departments or through medical and technological research groups. Firms like BioTek rely on UVM for access to their engineering department and other groups. Firms rely on colleges and universities for their workforce as well. There is some benefit to being in close proximity to engineering departments because there are graduates of those programs who might have an interest in staying in the area and working for local and regional firms. Colleges and universities can help supply biomedical/biotechnical firms with entry-level employees.

One drawback about Vermont's biomedical sector is that "it is hard to attract top flight engineers to Vermont if they have to relocate from out of state. There are not a lot of fallback positions if they want to stay in biomedical and things do not work out at their original destination."[40] BioTek, for example, which is located in Winooski, has either not attracted candidates for that reason or has had candidates refuse at the last minute. MBF Bioscience, based in Williston, requires software developers and lab technicians, generally with at least a college degree who are technically or biologically trained. Proximity to other biotechnical companies is helpful in terms of synergies in working with other companies. Johnson might be in a tougher position due to its distance from other biomedical opportunities.

There is some benefit to being in an area with a critical mass of machine shops also, as mentioned by a contact at BioTek. While BioTek's physical infrastructure is relatively self-contained with an engineering department, marketing and sales department, and even their own machine shop (allowing them to make their own parts), their company has grown big enough that they rely on outside machine shops.

Other infrastructure needs of biomedical/biotechnical companies include Phase 3 power, high speed Internet, as well as common infrastructure needs like water, sewer, wastewater, and natural gas. BioTek, for example, requires a certain purification of water, but this is done in-house. MBF Bioscience requires a very stable floor (cement, not wood), because they use equipment that is sensitive to vibration. Their preference is also for one story, not two, and they require a loading dock (not raised) to take shipments.

[40] Personal phone communication with Jonathan Trefry, of BioTek. May 11, 2012.

Spaces ranged from 10,000 square feet to 40,000 square feet. Companies we spoke with lease their buildings, have room to expand at their current locations, and were not interested in having the ability to configure their own buildings. These companies range in size from 37 employees to almost 400. MBF needed $120,000 in financing for set up and renovations when they first set up their business location. According to Jack Glaser at MBF, "The easier you can make that by a guarantee or assistance, the better. Low interest loans would be helpful as well." This would be helpful for firms in any sector.

What Johnson Has to Offer the Biomedical/Biotechnical Sector

The Town of Johnson has a variety of infrastructure assets that it can bring to the Jewett property site, including municipal water and sewer, an electric cooperative utility directly across the street, and high speed Internet including access to fiber optic connection. Johnson is home to Johnson State College, which does not have an engineering department, but does offer majors such as biology, chemistry, and other health and nature based sciences. The Green Mountain Technology and Career Center, in Morrisville, has a number of offerings in the life sciences, and is willing to work with employers to develop new curricula and course offerings that will be beneficial to those employers and the potential employees that can be trained and hired by them. The Town of Johnson is within an hour of Fletcher Allen Health Care in Burlington. However, the level of educational attainment of residents seeking employment in and around Johnson is not a good fit for the needs of the biomedical/biotech sector at this time and Johnson lacks a strong cultural and business foundation in the biosciences. In addition, Johnson is not in close enough proximity to an interstate or strong research institutions.

Sectors: Summary of Findings

There are two sectors well-suited to the Town of Johnson that are growing and expected to continue to grow in Vermont. These are: 1) agribusiness, food processing and technology; and 2) energy and environmental services. Agribusiness, food processing and technology includes: support activities for crop production; support activities for animal production; food processing and beverage manufacturing; agricultural chemical manufacturing; agricultural implement manufacturing; food product machinery manufacturing; farm and garden equipment merchant wholesalers; farm product raw material merchant wholesalers; and farm supplies merchant wholesalers. Energy and environmental services includes: suppliers of services, equipment and products which increase energy efficiency; as well as firms involved in providing access to and use of renewable energy (solar, wind, geothermal, hydropower, and biomass) sources through research and development, manufacturing and installation of renewable energy technologies. The environmental services sector also includes professionals, such as engineers, scientists and lawyers, who provide technical and scientific expertise for a wide variety of environmental issues such as energy, remediation and restoration.

These two sectors also prove to be well-suited to the Town of Johnson in terms of workforce development. Both sectors require a variety of potential workers at different levels, including entry

level workers. One reason the Town of Johnson is interested in this potential light industrial/commercial park is as a mechanism to create jobs for local residents. As of the 2010 Census, the Town of Johnson had over 10% unemployment, with a mean household income of $40,007 and a median household income of $27,808.[41] In addition, 62.8 % of residents earn less than $50,000.

Data shows that Vermont's agribusiness, food processing and technology and its energy and environmental services sectors are robust and expected to grow. As of 2010, Vermont had at least 457 food processing establishments that employed at least 4,356 people. Food processing is the second largest manufacturing sector in the state and is one of two manufacturing sectors that saw employment growth from 2007 to 2010 during an economic recession. [42] Recently, Vermont has had significant investments made in food processing facilities – including the Vermont Food Venture Center in Hardwick, and the Mad River Food Hub in Waitsfield – which are designed to work with food businesses at various stages of their life-cycle. The hope is that a business would grow out of that space and eventually need its own processing facility; this could be an opportunity for a Johnson light industrial/commercial park (with a possible focus on food processing) to provide expanded processing opportunities for growing food businesses.

In a 2009 survey of firms in Vermont's environmental sector, over half the responding firms expect to grow their environmental business over the next five years with only 5% expecting to shrink. Eighty-eight percent of firms in Vermont's environmental sector that export goods and services outside of Vermont expect to grow in the next five years.[43]

In addition to demand from Vermont firms, we also explored potential demand by Canadian firms and concluded that Johnson is too far from the border and from the interstate to be attractive to Canadian companies. The location does not provide them with the ease of management and access to interstates that they prefer.

Focusing on the two target sectors may help fill lots by building strong relationships within sectors so that businesses recommend Johnson to other businesses in their sector over time. We do not recommend continuing to focus on the biomedical/biotechnical sector as this sector's requirements for proximity to interstate and international transportation, research universities and research hospitals, engineers and machine shops will not be well met by a Johnson light industrial/commercial park at this time.

---

[41] Selected Economic Characteristics. 2006-2010. American Community Survey 5 year estimates. U.S. Census Bureau.

[42] Farm to Plate Strategic Plan Executive Summary. Vermont Sustainable Jobs Fund. July 2011.

[43] Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities. Yellow Wood Associates and the Vermont Environmental Consortium. December 2009.

Art Museum

There was discussion early on about the possibility of an art museum in Johnson on the Jewett property. The Town of Johnson has a significant art community, being home to the Vermont Studio Center and to Johnson State College, which has a serious art program. To learn more about the potential for this option, we connected with the Vermont Arts Council, which is a state arts agency that is also an independent nonprofit membership organization, founded in 1964 to enrich lives, expand minds, and form a vital thread in the fabric of Vermont community life through art.

Alex Aldrich, the Executive Director[44], counseled Johnson to "look at the possibility of an art museum with great caution. There are three fairly substantial nonprofit art galleries within a half-hour of Johnson (Bryan, River Arts, and Helen Day) and, in Stowe, several commercial galleries. The competition is definitely there, but depending on financing, access, etc., it could be a great opportunity for Johnson…" The next step in exploring this option would be a series of conversations with the Vermont Studio Center and Johnson State College as well as a continuing conversation with the Vermont Arts Council. It is unlikely that an art museum would be a significant economic driver in the short run.

Findings and Recommendations

Competition

The potential Johnson light industrial/commercial park will be competing with existing parks. There are four "industrial parks" in the region, including one in Hardwick (focused on agribusiness and also housing the Vermont Food Venture Center), one in Morrisville, one in North Hyde Park and one in Cambridge. Between those parks, there may be 2-3 lots available in Hardwick, none in the Lamoille Industrial Park in Morrisville, four unsold lots in the Cambridge Enterprise Center (according to John Mandeville, these are unbuildable), and five "shovel ready" lots available in North Hyde Park.

In terms of location, Johnson would be preferable to North Hyde Park due to its closer proximity to transportation and markets. The industrial park in North Hyde Park started 15 years ago with 15 one-acre lots. According to Marvin Locke, the park owner/manager, it was about 5 years until someone purchased a property. Some businesses have bought more than one lot. There is a landscaping business (which has bought 5 lots), a body shop for trucks (which has bought 2 lots), a government project, and others. According to Locke, it is a tough climate to sell commercial property. Yet, Locke has been able to sell 10 lots in 15 years.

Morristown is considering building an industrial park in the designated Business Enterprise District (BED) zone on the south side of town, according to Mandeville, but "even if that were to come to fruition, it is years away from reality." If Johnson acts in a timely manner, is ready to move when the

[44] Email conversation with Alex Aldrich, Executive Director of the Vermont Arts Council, May 23, 2012.

economy turns around, builds on its assets and focuses on the sectors described below, we believe a Johnson light industrial/commercial park can compete successfully over time.

The light industrial/commercial park that the Town of Johnson is exploring would offer municipal services (sewer and water, 10,000 gallons per day of wastewater capacity, electric through the Village of Johnson Water & Light Department); mixed use land use; and information technology possibilities including Comcast, Cable, DSL and fiber optic for lots that tenants would buy and then build on. Since businesses would need to invest in their own buildings, and this is a significant investment for a new business, it is unlikely that a start-up or an entrepreneur would be interested in a parcel in this park. It is more likely a parcel in this light industrial/commercial park would be attractive for an existing business that has been operating at a smaller scale, but is ready to scale up. These could be businesses in and around Lamoille County or businesses from elsewhere that may be interested in the recreation and quality of life opportunities provided by Lamoille County. Research indicates that some expanding businesses prefer to lease property while others are interested in ownership.

Experiences of other rural communities, in Vermont and elsewhere, suggest that the Town should assume that the park will require at least a decade to build out. This means the Town needs to be prepared to allocate staff and other resources to the park as an ongoing effort if it is to succeed. The extent of direct Town involvement will depend on whether or not the Town can identify a development partner with an interest in purchasing the property from the Town and taking on the responsibility for its development. Based on limited research, and given current economic conditions, no one with whom we have spoken has shown interest in this kind of partnership. (See the Interim Report for a detailed discussion of partnering options.) However, there are steps the Town can take, detailed in the final report, to improve the incentives it is able to offer to businesses that could, in turn, increase the interest of potential partners. We also recommend a discussion with David Hallquist, CEO of Vermont Electric Cooperative, to explore a more active role for the Cooperative in the development of the park. Some electric cooperatives have had positive experiences as developers of industrial/commercial parks. As with most complex endeavors of this sort, capturing the apparent opportunity will require patience and some ongoing investment before returns are forthcoming.

Demand from Canada

Originally, we were thinking that a Johnson light industrial/commercial park might be a draw for Canadian businesses (from the Province of Quebec) that may be seeking a U.S. satellite office or address. One realtor, Mark Barie of CDC Real Estate in Rouses Point, NY[45], who focuses on cross border development, specifically discussed the three factors that Canadian companies consider in looking for United States properties:

1. A US zip code. Canadian companies want to have US zip codes.

[45] Personal communication with Mark Barie, CDC Real Estate. May 23, 2012.

2. Ease of management. Canadian companies want to be able to solve problems with their US satellites quickly and easily. Many visit US satellites once a week.
3. Ease of access to markets. This is facilitated by easy access to an interstate.

In Barie's opinion, Johnson is too far from the border and from the interstate to be attractive to Canadian companies. He suggests the Town spend their efforts on a direct marketing campaign to attract businesses and industry to the area.

Regardless of whether a Canadian company would be interested in locating in Johnson, the Town of Johnson has an interest in export industries that may bring new dollars into the community. A focus on either the agribusiness, food processing and technology sector or the energy and environmental services sector may be a good way to pursue this goal.

Making a Decision

The Town of Johnson is required to make a decision regarding the option on the Jewett property. There are essentially two options moving forward, which are laid out with pros and cons below.

Option 1: Negotiate a better deal on the Jewett property option and purchase price and take the one year option.

From conversations with professionals in commercial real estate, the price for the option and the property are high. Realtors we spoke with felt that $10,000 per acre is what they would pay for undeveloped land and not more than $200,000 for this particular property. At $265,000 for 17 acres, the Jewett property will cost about $15,588 per acre. One commercial realtor thought the price for the option was similarly too high. The options he usually purchases on commercial properties are $1,000 for one year. The option on the Jewett property is $5,000 for one year. We believe the Town should negotiate for a lower option and purchase price. Given that commercial real estate contacts felt that both prices were too high, it is unlikely that the Jewett's would find a buyer at the price they are asking of the Town.

If the Town does end up purchasing the property, it has several options, including A) Selling the residential lots to cover carrying costs for the light industrial/commercial park; B) Developing the proposed light industrial/commercial park itself; C) Reselling it to a partner/developer; or D) Holding it until it can find a suitable owner and use for the property.

Pros – for taking the one year option:

1. The Town saves money from the original option asking price and property asking price.
2. The Town maintains its option to purchase going forward.
3. One year will give the Town more time to determine whether it is in their best interests to purchase the property. This time should be spent working to identify development partners, exploring financing and incentives, marketing to potential tenants in the two target sectors, considering what, if any, covenants or restrictions to place on the property before resale, and soliciting input from voters. We would only recommend the Town take the option if there is sufficient staff and/or volunteer time and commitment to actively pursue next steps over the next year including: identifying partners, considering covenants, and marketing the property to potential users. Paying for the option without being prepared to actively pursue next steps would not likely be money well spent.
4. Another year may make it clearer that the Town does not want to purchase the property to hold in the short or long term and is willing to forgo any control over how it is developed, beyond that already provided by Town regulations.

Pros – for purchasing the property:

1. If the Town purchases the property, it can choose to place covenants on the property that predispose it (or portions thereof) for light industrial/commercial use and restrict undesirable uses.[46]
2. The Town retains control over a significant parcel of property.
3. The carrying costs associated with this property will keep the Town focused on its development and staff will become more aware of development activities in the region and in the two target sectors and the roles Johnson might play.

Cons:

1. Negotiations may fail in which case the Town may have to pay more than the property is "worth" to continue to keep its options open.
2. The Town will incur carrying costs, likely for many years (unless it resells the property), as the property develops in increments. The current taxes on the property are approximately $2,150 per year.
3. Staff time will be needed to pursue next steps in the short and longer term.
4. Voter approval for the option and for the purchase of the property may be very difficult and potentially divisive.

Option 2: Do not take the option on the Jewett property

Pros:

1. The Town saves money in the short run.
2. The Town saves itself from voter dissatisfaction and a potentially divisive issue.
3. The Town saves itself from the burden of ownership and does not have to seek a partner or market the property or develop financing and incentives.
4. The Town does not have to allocate staff time to pursuing next steps.

Cons:

1. The Town loses control over a significant parcel of property within its boundaries.
2. The Town loses the opportunity to respond to emerging opportunities and to create new jobs and new tax revenues over time using this property.
3. The Town loses the opportunity to bring its supporting resources, including VEC, Johnson State College, LEDC, Lamoille Regional Planning Commission, into alignment around specific economic development opportunities related to the development of the property. This type of alignment could have positive spinoffs for the region as a whole over time.

---

[46] According to Stephanie Smith at the Vermont League of Cities and Towns, unless the Town has a property interest right, they cannot place restrictions on the property, unless they adopt zoning. If the Town is interested in pursuing an agreement with a property owner, an attorney should be consulted. According to Peg Elmer, formerly of Vermont Law School, it is possible for the Town to place restrictions on the property without ownership, as part of the development review process or as a negotiated condition of approval. For more information, contact the Vermont League of Cities and Towns.

This is not an easy choice for the Town to make, but it does have serious implications for how the Town wants to look and function in the future.

Target Sectors

If the Town does move forward with the option, property purchase and light industrial/commercial park concept, we would suggest focusing on the agribusiness, food processing and technology sector and the energy and environmental services sector. There are several businesses that have expressed interest in being contacted if the Town moves forward with this concept. While Johnson's quality of life and ample recreational and cultural opportunities are a draw, the biomedical/biotechnical sector requires more than Johnson has to offer at this point in terms of interstate and international transportation options, proximity to major educational and research institutions and proximity to a significant health sector. Other sectors that were mentioned by economic development professionals in our research included manufacturing, recreation and tourism related businesses, and back office operations.

One reason the Town of Johnson is interested in this potential light industrial/commercial park is as a mechanism to create jobs for local residents. As of May 2012, over 75% of the job seekers in Lamoille County were out of school with a high school degree. As of the 2010 Census, the Town of Johnson had over 10% unemployment, with a mean household income of $40,007 and a median household income of $27,808.[47] In addition, 62.8 % of residents earn less than $50,000. Both the agribusiness, food processing and technology sector and the energy and environmental services sector offer entry level jobs with some advancement opportunities. Both are sectors for which existing workforce training resources can be adapted.

Next Steps

If the Town of Johnson decides to proceed with the option and the potential purchase of the Jewett property, there are several next steps to consider.

Partners

The Town of Johnson is interested in the jobs and revenues that result from the development of a light industrial/commercial park. It is our understanding that the Town does not want to be in the business of real estate or development. As a result, the Town will want to consider forming a partnership with another entity that may be better suited to that part of the endeavor. There are a variety of options available, including commercial realtors/developers; economic development organizations, local development corporations, etc.

---

[47] Selected Economic Characteristics. 20ken
06-2010. American Community Survey 5 year estimates. U.S. Census Bureau.

Commercial Realtors/Developers

In talking with a few realtors, we have learned that commercial realtors want to own a property that they are marketing. The three commercial realtors we contacted were not interested in partnering with a community. None of the realtors we spoke with were interested in being a part of the light industrial/commercial park in Johnson. One option for Johnson is to purchase the property, develop covenants for the property, and then sell it to a commercial development realtor to develop as it sees fit. In this way, the Town will reap the benefits of the jobs and revenue, without the legwork of developing the infrastructure, marketing and selling lots. At the same time, through covenants, the Town can have some input into what is and is not located on that property.

Local Development Corporations

Another potential partner is a local development corporation. According to Vermont Statute Title 10[48], "local development corporation" means "any nonprofit organization incorporated in the state for the purpose of fostering, encouraging, and assisting the physical location of business enterprises within the state and having as its principal purpose the industrial and economic development of one or more political subdivisions, and shall include the Northeastern Vermont Development Association and any state development company organized under subdivision 216(13) of this title; however, in addition to the foregoing, for the purpose of providing assistance to small business incubator facilities, any nonprofit organization which enters into a written agreement with the authority to establish, operate, and administer a small business incubator facility, including municipalities, local or regional nonprofit development corporations, and higher educational institutions, shall have the rights and obligations of a local development corporation under this chapter."

VEDA considers the Lamoille Economic Development Corporation (LEDC) a regional development corporation, which is also eligible for VEDA assistance. The Lamoille Economic Development Corporation (LEDC) is a nonprofit organization having as its primary mission to increase and expand quality job opportunities for county residents. Services include start-up and expansion, assistance, plant location and construction, financing, employee training, state tax incentives and local business information. There may be a possibility of working with the LEDC to apply for VEDA local development corporation loans. The Lamoille Regional Planning Commission is another option for a partnership of some sort.

Utilities

There are locations in which electric cooperatives have collaborated with local industrial development or economic development agencies or developed industrial properties on their own. This practice leads to new customers for the electric utility as well as stronger communities. The Town may want to begin a conversation with David Hallquist at Vermont Electric Cooperative to gauge interest in partnership.

---

[48] Vermont Statute Title 10: Conservation and Development, Chapter 12: Vermont Economic Development Authority, 10 V.S.A. § 212. Definitions

An example is the Pee Dee Electric Cooperative[49], established in 1939 to provide electricity to a six county rural region in South Carolina that was not being served by investor-owned utilities. Using the Cooperative Finance Corporation, Pee Dee created Commerce City, a 717-acre industrial park with 1.4 miles of frontage on I-95. It was created as a way to bring jobs to the region and improve the quality of life. Pee Dee purchased the land and obtained all permits required for building on the sites, creating "shovel ready" acreage for commercial, industrial, corporate and retail use. This was a partnership where the counties were instrumental in promoting the park, bringing prospects to the site, and helping to put together incentive packages. A city-county partnership was essential in bringing water/sewer to the site. Pee Dee Electricom, a for profit subsidiary of the rural electric cooperative, has taken a cautious approach to developing Commerce City, by phasing in infrastructure investment as required by new tenants. Pee Dee Electric Cooperative is dedicated to its primary activity, the delivery of reliable low cost electricity. However, once all the parcels in Commerce City are sold, Pee Dee Electricom will look for a new site to develop into an industrial park. Another example is that of the Flathead Electric Cooperative (see page 4).

Park Development Options

The Town's current thinking that the Town will develop the infrastructure and individual businesses will purchase sites and develop them according to their needs is one possibility. This possibility limits the Town's financial contribution to the cost of the land and the cost of infrastructure development. However, not all companies want to be in the business of building and owning their own facility. The needs of food processing businesses and the needs of energy and environmental services businesses with regard to space and configuration are quite different. Many of the companies we spoke with were happy to be leasing space.

The Town may want to consider other potential options for structuring the offerings of this potential light industrial/commercial park. Another more financially intensive option, which may be more marketable, is building one or more buildings, with the understanding that space would be leased for corporate offices, not necessarily for processing or manufacturing activities, which require more customizable space options. To reduce cash outflows, the Town may want to consider selling the residential lots to help pay for development expenses on the light industrial/commercial lots.

Marketing[50]

Effective marketing and promotion is integral to the success of developing a light industrial/commercial park. The spec sheet that was developed may be a useful tool for connecting with potential tenants. Another valuable marketing mechanism may be the Vermont Department of Economic Development, Agency of Commerce and Community Development, which hosts the Vermont Commercial/Industrial Site Locator. The Site Locator allows a company interested in

[49] Zeuli et al. Non-agricultural Cooperatives in Rural Areas: Fourteen Case Studies. Case Study Series, University of Wisconsin Extension. 2003.

[50] Adapted from: Frej, Anne, et al. Business Park and Industrial Development Handbook. Washington, D.C.: ULI – the Urban Land Institute, 2001.

relocating to Vermont or a company interested in relocating within Vermont to search by region, county, town, sale or lease, type of property (commercial, industrial, land, mixed, office, retail, etc.), and minimum and maximum square footages[51]. Another tool to develop would be a description of how the project will be presented and promoted. For example, it would be useful for potential tenants to have an understanding of park amenities (as currently envisioned), as well as potential price structures.

Marketing to potential tenants can happen at any point and will continue until the park is filled. Yellow Wood suggests that the Town of Johnson continue to connect with membership and trade associations in the two sectors, including the Vermont Sustainable Jobs Fund, the Vermont Food Venture Center, and the Mad River Food Hub for the agribusiness, food processing and technology center; and Renewable Energy Vermont and the Vermont Environmental Consortium for the energy and environmental services sector. These are growing sectors to which Johnson has much to offer. Renewable Energy Vermont has a monthly email newsletter and has offered to include a mention about this potential light industrial/commercial park to garner interest from members. Vermont Environmental Consortium has a monthly newsletter and may be able to offer this also. In addition, the Town should continue discussions with economic development agencies, like the Vermont Department of Economic Development, the Lamoille Economic Development Corporation, the Lamoille Regional Planning Commission, and other nearby regional economic development agencies and industrial development agencies, to keep them apprised of progress on the light industrial/commercial park and to ask for suggestions of businesses that might be interested. There is a list of contacts in Appendix A for many of these organizations and agencies. Another strategy is to follow local and regional businesses' growth in an effort to learn more about when businesses are considering expansion and/or relocation. One commercial realtor suggested a direct mail campaign to potential tenants; cold calling is another method.

As part of this marketing, the Town should continue to identify potential business incentives and business assistance options that may be valuable in attracting potential anchor tenants to a Johnson light industrial/commercial park. Continuing to have conversations with local, regional and state economic development agencies may help to acquire these new ideas.

Securing an anchor tenant can help draw other tenants and can also determine the overall tenant mix. Incentives may be required for a lead tenant to make a commitment. Devoting some time to finding an initial tenant with a good business reputation that can anchor the park can help set the tone for the entire development, creating a competitive advantage that can draw in other tenants.

Marketing and public relations may be an advantage of partnering with a real estate/development company, as they may have an in-house leasing/sales staff or they may work with a broker.

---

[51] Vermont Commercial/Industrial Site Locator. Call (802) 828-3080 or email info@thinkvermont.com. http://www.vtsitelocator.vermont.gov/

Project Identity

In marketing this park, the Town should consider ways of setting this park apart from the others available in Lamoille County and elsewhere. One way of doing this would be to market a focus on a particular sector or sectors, potentially the agribusiness, food processing and technology sector or the energy and environmental services sector. The Hardwick Industrial Park is marketed as an agribusiness industrial park. One suggestion from Ken Horseman at the Department of Economic Development was to market a Johnson light industrial/commercial park as an energy park, offering low cost energy; as energy costs can be significant for businesses, he thought this might be enough of an attraction to interest businesses from beyond Lamoille County.

Marketing Materials

Marketing materials should portray the project identity clearly and consistently. Examples of marketing materials include:

- **Brochures or Spec Sheets.** These include a project description, development plans, specific descriptions of available space, technical information about the site, summary of relevant regulations, community context, and local and regional information. Yellow Wood has already developed a spec sheet, which is in Appendix D.
- **Web Pages.** In addition to providing all the information that the brochure has, a web page can include ancillary information.

Visual Impressions

The visual impressions associated with a potential light industrial/commercial park are an important marketing tool as well. A well-designed entrance can help make an immediate favorable impression as can landscaping. Signage is also important and developing a set of sign guidelines is recommended.

Funding

Once a community decides to move ahead with a light industrial/commercial park, it is critical to find a source of funds to finance site infrastructure and/or construction. Below are a few ideas for funding sources to pursue. Some are grants and some are loans; some are federal and some are state. More detail and contact information for each funding source is in Appendix B.

National Resources

Public Works and Economic Adjustment Assistance Programs Opportunity

The Economic Development Administration (EDA) supports development in economically distressed areas of the United States by fostering job creation and attracting private investment. Specifically, under the Federal Funding Opportunity, EDA will consider construction, non-construction, and revolving loan fund investments under the Public Works and Economic Adjustment Assistance programs. Grants made under these programs will leverage regional assets to support the implementation of regional economic development strategies designed to create jobs,

leverage private capital, encourage economic development, and strengthen America's ability to compete in the global marketplace.

Rural Jobs and Innovation Accelerator Challenge

The Rural Jobs and Innovation Accelerator Challenge offers a combination of $15 million in funding from 4 agencies, including the U.S. Department of Commerce's Economic Development Administration, the U.S. Department of Agriculture, the Appalachian Regional Commission, and the Delta Regional Authority. Funding will be awarded in approximately 20 regions through a competitive inter-agency grant process. In addition, the Rural Jobs and Innovation Accelerator Challenge leverages existing technical assistance resources from 9 federal agencies and bureaus to promote economic growth in rural regions and accelerate innovation-fueled job creation and global competitiveness. This opportunity will support customized solutions targeted to address the gaps and opportunities specific for individual regions by strengthening linkages to self-identified, high-potential industry clusters such as renewable energy, natural resources, food production, rural tourism, and advanced manufacturing.

Planning and Local Technical Assistance Programs Opportunity

These programs will help communities develop the planning and technical expertise to support communities and regions in their comprehensive, entrepreneurial, and innovation-based economic development efforts. Resulting in increased private investment and higher-skill, higher-wage jobs in areas experiencing substantial and persistent economic distress, these programs are designed to enhance the competitiveness of regions. EDA's Planning and Local Technical Assistance Programs are two of the six economic development assistance programs the agency operates under PWEDA. Under the Planning Program, EDA provides assistance to eligible recipients to create regional economic development plans in order to stimulate and guide the economic development efforts of a community or region. EDA's Local Technical Assistance Program helps eligible recipients fill the knowledge and information gaps that may prevent leaders in the public and nonprofit sectors in economically distressed regions from making optimal decisions on local economic development issues.

Rural Community Development Initiative (RCDI)

Qualified private, nonprofit and public including tribal) intermediary organizations proposing to carry out financial and technical assistance programs will be eligible to receive the funding. The intermediary will be required to provide matching funds in an amount at least equal to the RCDI grant. The respective minimum and maximum grant amount per intermediary is $50,000 and $300,000. The intermediary must provide a program of financial and technical assistance to a private nonprofit, community-based housing and development organization, a low-income rural community or a federally recognized tribe.

Rural Business Enterprise Grants (RBEG)

The RBEG program provides grants for rural projects that finance and facilitate development of small and emerging rural businesses help fund distance learning networks, and help fund employment related adult education programs. To assist with business development, RBEGs may

fund a broad array of activities. There is no maximum level of grant funding. However, smaller projects are given higher priority. Generally grants range $10,000 up to $500,000. Rural public entities (towns, communities, State agencies, and authorities), Indian tribes and rural private non-profit corporations are eligible to apply for funding. At least 51 percent of the outstanding interest in any project must have membership or be owned by U.S. citizens or resident aliens. The RBEG program is a broad based program that reaches to the core of rural development in a number of ways. Examples of eligible fund use include: Acquisition or development of land, easements, or rights of way; construction, conversion, renovation, of buildings, plants, machinery, equipment, access streets and roads, parking areas, utilities; pollution control and abatement; capitalization of revolving loan funds including funds that will make loans for start ups and working capital; training and technical assistance; distance adult learning for job training and advancement; rural transportation improvement; and project planning. Any project funded under the RBEG program should benefit small and emerging private businesses in rural areas. Small and emerging private businesses are those that will employ 50 or fewer new employees and have less than $1 million in projected gross revenues.

Vermont Resources

Local Development Corporation Loans

This program provides financing to nonprofit local and regional development corporations to build facilities for lease to identified eligible tenants, or to plan and/or develop industrial parks.

Municipal Planning Grant (MPG) Program

For many years, annual funding has been provided to support municipal planning projects. This support, in the form of grants, has helped draft and update town plans and bylaws. Grants are available to municipalities with a confirmed local planning process. Municipalities without a confirmed local planning process may only apply for funding to obtain confirmation.

Vermont Community Development Program (VCDP)

The Vermont Community Development Program (VCDP) assists communities on a competitive basis by providing financial and technical assistance to identify and address local needs in the areas of housing, economic development, public facilities, public services, handicapped accessibility modifications.

Looking Back and Looking Forward

The Town of Johnson has an opportunity now to take control of its future, by taking an option and potentially purchasing a 17-acre property for a light industrial/commercial park. The question is what the Town would like to see happening there 20 years from now.

Right now, Vermont, like the rest of the country, is in the middle of a significant economic recession. The Town of Johnson has an opportunity to embark on serious planning now for the future of its community before the economic expansion begins.

There have been several businesses that have left the Town of Johnson despite wishing to stay, like Rock Art Brewery and Butternut Mountain Farm, because there were no light industrial/commercial lots available for them. It is likely that there will continue to be businesses growing in Vermont and looking to expand that are already in or could be attracted to the Town of Johnson as the economy improves.

"The best time to plant a tree is twenty years ago. The second best time is now."

- Chinese Proverb

Appendices

Appendix A: List of Contacts

Sector Contacts

1. Jon Trefry, BioTek, 888-451-5171
2. Avatar Energy, 802-651-4775
3. Annette Small, Bourne's Energy, 802-888-2611
4. Dan Dudac, Radiantec Company, 800-451-7593
5. Chris Crandall, The Johnson Company, 802-229-4600
6. Doug Wells, The Solar Specialists, 802-223-7014
7. Jerry Ducas, Barry Callebaut USA, 802-524 9711
8. David Marvin, Butternut Mountain Farms, 802-777-0255
9. Ellen Kahler, Vermont Sustainable Jobs Fund, 802-828-1260
10. Green Mountain Maple Sugar Refining Company, Inc., 802.868.7600
11. Jim Harrison, Vermont Grocer's Association, 802-839-1928
12. Leon Berthiaume, St. Alban's Cooperative Creamery, 802-524-6581
13. Renee Nadeau, Rock Art Brewery, 802-888-9400
14. Jeremy Elliot, Smugglers' Notch Distillery, 802-309-3077
15. Jack Glaser, MBF Bioscience, 802-288-9290
16. Gabrielle Stebbins, Renewable Energy Vermont, 802-229-0099
17. Heidi Krantz, Food Venture Center, 802-472-5840
18. Brenan Riehl, GW Plastics, 802-234-9941
19. Andy Fraser, AEF Consulting, 802-730-2325
20. Michael Stafford, Sterling Staff Management, 802-253-2505
21. Therese Churchill, Evergreen Environmental, 802-239-4696
22. Alex Aldrich, Vermont Arts Council, 802-828-3293

Regional Contacts

23. Bob Selby, Chair of the Johnson Planning Commission
24. Barbara Murphy, Johnson State College, 802-635-1240
25. Cindy Locke, Lamoille Region Chamber of Commerce, 802-888-7607
26. Howard Manosh, Vermont Precision Woodworks
27. Tim Smith, Franklin County Industrial Development Corp., 802-524-2194
28. John Mandeville, Lamoille Economic Development Corp., 802-888-5640

Statewide Contacts

29. Chris Carrigan, Vermont Chamber, 802-223-0904
30. Kiersten Bourgeois, Vermont Department of Commerce and Community Development, 802-828-5220
31. Marie Dussault, Vermont Economic Development Authority, 802-828-5461
32. Brent Raymond, Vermont Global Trade Partnership, 802-828-1681

33. Matt Sayre, University of Vermont, 802-656-4174
34. Brian Werneke, Vermont Manufacturing Extension Center, 802-355-4845
35. Patricia Moulton Powden, Deputy Secretary and Economic Development Director, Vermont Agency of Commerce and Community Development, 802-828-5200
36. Ken Horseman, Vermont Department of Economic Development, 802-828-5236
37. Stephanie Smith, Vermont League of Cities and Towns, 800-649-7915

Other

38. Kristine Jackson, Touchstone Energy, Sites Across America, 703-907-5633
39. Fred Gassaway, Palmetto Economic Development Corporation. 803-254-9211

Realtors

40. Yves Bradley, Pomerleau Real Estate, 802-863-8210
41. Mark Barie, CDC Real Estate, 802-545-8125
42. Stephanie Miller Reiskin, R.E.M. Development / The Miller Realty Group, 802-864-5830

Companies That Expressed Interest in Further Contact

Bourne's Energy - Annette Small
802-888-2611
171 Bridge Street
Morrisville, VT 05661

The Solar Specialists - Doug Wells
802-223-7014
3828 Stagecoach Rd # C
Morrisville, VT

AEF Consulting - Andy Fraser
802- 730-2325
334 Dukes Road
Johnson, VT 05656-9254

Sterling Staff Management LLC - Michael S. Stafford
802-253-2505
2368 Sterling Valley Rd.
Morrisville VT 05661

Vermont Electric Cooperative - David Hallquist
802-730-1138
42 Wescom Road
Johnson, VT 05656-9579

Appendix B: Funding Resources

Federal Grants

Economic Development Administration

In recent years, the U.S. Department of Commerce, Economic Development Administration (EDA) has funded many industrial parks in many communities. The Public Works and Economic Development Facilities program would be most appropriate for a Johnson light industrial/commercial park project. EDA provides strategic Public Works investments to support the construction or rehabilitation of essential public infrastructure and facilities to help communities and regions leverage their resources and strengths to create jobs, drive innovation, become centers of competition in the global economy, and ensure resilient economies.

EDA is allocating $111,640,000 for the Public Works and Economic Development Facilities program in FY 2012. The average size of a Public Works investment in FY 2011 was approximately $1.7 million, though investments ranged in size from $500,000 to $2,000,000.

Projects must be consistent with the region's Comprehensive Economic Development Strategy (CEDS) or alternate EDA-approved strategic planning document capable of meeting EDA' s CEDS or strategy requirements. EDA also requires a map of the project site, letters of commitment and assurances of compliance from project beneficiaries, preliminary engineering report, comments from the metropolitan are review / clearinghouse agency (if applicable), environmental report, and copies of any existing correspondence with or sign-offs/approvals from other agencies with respect to the project.

Even with the availability of outside funding from federal or state sources, communities must commit substantial local funds for these projects. Communities need to make tough decisions about the allocation of funds for industrial park projects and be creative in raising funds. Options such as private-public partnerships, land trusts, bond financing, and other financing mechanisms will need to be considered in conjunction with or, in some cases, in lieu of EDA or other public financing. EDA requires a 50%-80% community match.

> **Public Works and Economic Adjustment Assistance Programs Opportunity**
>
> The Economic Development Administration (EDA) supports development in economically distressed areas of the United States by fostering job creation and attracting private investment. Specifically, under the Federal Funding Opportunity, EDA will consider construction, non-construction, and revolving loan fund investments under the Public Works and Economic Adjustment Assistance programs. Grants made under these programs will leverage regional assets to support the implementation of regional economic development strategies designed to create jobs, leverage private capital, encourage economic development, and strengthen America's ability to compete in the global marketplace.

For more information, visit:
http://www.grants.gov/search/search.do;jsessionid=XfMNPyLVtKZGfvLW3JwvdSK5pPRLXhYfvGW9cMTxNhDKM5QzmZ6x!545677704?oppId=131493&mode=VIEW

http://www.eda.gov/PDF/FY_2012_EDAP_FFO_11-18-11_FINAL.pdf

For more information, contact:
New York & Vermont
John Marshall
620 Erie Boulevard West, Suite 104
Syracuse, NY 13204-2442
315-448-0938

Planning and Local Technical Assistance Programs Opportunity

These programs will help communities develop the planning and technical expertise to support communities and regions in their comprehensive, entrepreneurial, and innovation-based economic development efforts. Resulting in increased private investment and higher-skill, higher-wage jobs in areas experiencing substantial and persistent economic distress, these programs are designed to enhance the competitiveness of regions. EDA's Planning and Local Technical Assistance Programs are two of the six economic development assistance programs the agency operates under PWEDA. Under the Planning Program, EDA provides assistance to eligible recipients to create regional economic development plans in order to stimulate and guide the economic development efforts of a community or region. EDA's Local Technical Assistance Program helps eligible recipients fill the knowledge and information gaps that may prevent leaders in the public and nonprofit sectors in economically distressed regions from making optimal decisions on local economic development issues.

For more information, visit:
http://www07.grants.gov/search/search.do;jsessionid=QpsPP2bVD6lt2KDyNlyL8pms6S3m2txMj4x14KQ7yHQnsgW4fLb5!884034953?oppId=58876&mode=VIEW

For more information, contact:
New York & Vermont
John Marshall
620 Erie Boulevard West, Suite 104
Syracuse, NY 13204-2442
315-448-0938

Rural Jobs and Innovation Accelerator Challenge

The Rural Jobs and Innovation Accelerator Challenge offers a combination of $15 million in funding from 4 agencies, including the U.S. Department of Commerce's Economic Development Administration, the U.S. Department of Agriculture, the Appalachian Regional Commission, and the Delta Regional Authority. Funding will be awarded in approximately 20 regions through a competitive inter-agency grant process. In addition, the Rural Jobs and Innovation Accelerator Challenge leverages existing technical assistance resources from 9 federal agencies and bureaus to promote economic growth in rural regions and accelerate innovation-fueled job creation and global competitiveness. This opportunity will support customized solutions targeted to address the gaps and opportunities specific for individual regions by strengthening linkages to self-identified, high-potential industry clusters such as renewable energy, natural resources, food production, rural tourism, and advanced manufacturing.

For more information, visit:
http://www07.grants.gov/search/search.do;jsessionid=q6JlP2SSS4JQbjSQ1cCz2l3dNG2fzV0yyjJtPKGtNhjWQpflS1sY!884034953?oppId=150574&mode=VIEW

Closed: May 9, 2012; Note: This program may or may not be repeated.

For more information, contact:
Vermont State Office
Rhonda Shippee
802-828-6033
TDD 802-223-6365

Rural Community Development Initiative (RCDI)

Qualified private, nonprofit and public including tribal) intermediary organizations proposing to carry out financial and technical assistance programs will be eligible to receive the funding. The intermediary will be required to provide matching funds in an amount at least equal to the RCDI grant. The respective minimum and maximum grant amount per intermediary is $50,000 and $300,000. The intermediary must provide a program of financial and technical assistance to a private nonprofit, community-based housing and development organization, a low-income rural community or a federally recognized tribe.

For more information, visit:
http://www.grants.gov/search/search.do;jsessionid=8MLWP2gd2xDPCwL9nN7Z4MkslppwpHNvfJ27PpgSj6w1cskQ14gQ!884034953?oppId=157274&mode=VIEW

Closed: May 9, 2012; Note: This program may or may not be repeated.

For more information, contact:
Shirley Stevenson

202-205-9685
202-690-0471 (fax)
shirley.stevenson@wdc.usda.gov

Rural Business Enterprise Grants (RBEG) Program

The RBEG program provides grants for rural projects that finance and facilitate development of small and emerging rural businesses help fund distance learning networks, and help fund employment related adult education programs. To assist with business development, RBEGs may fund a broad array of activities.

There is no maximum level of grant funding. However, smaller projects are given higher priority. Generally grants range $10,000 up to $500,000.

Rural public entities (towns, communities, State agencies, and authorities), Indian tribes and rural private non-profit corporations are eligible to apply for funding. At least 51 percent of the outstanding interest in any project must have membership or be owned by U.S. citizens or resident aliens.

The RBEG program is a broad based program that reaches to the core of rural development in a number of ways. Examples of eligible fund use include: Acquisition or development of land, easements, or rights of way; construction, conversion, renovation, of buildings, plants, machinery, equipment, access streets and roads, parking areas, utilities; pollution control and abatement; capitalization of revolving loan funds including funds that will make loans for start ups and working capital; training and technical assistance; distance adult learning for job training and advancement; rural transportation improvement; and project planning. Any project funded under the RBEG program should benefit small and emerging private businesses in rural areas. Small and emerging private businesses are those that will employ 50 or fewer new employees and have less than $1 million in projected gross revenues.

To apply for funding for the RBEG program, please contact your Rural Development State Office.

Each year, Congress provides program funding as called for in the Federal Budget. Fiscal Year funding levels will be made available as soon as possible after the beginning of each Fiscal Year.

For more information, contact:
David Robinson
Business and Cooperative Programs Director – USDA Vermont
802-828-6011
David.robinson@vt.usda.gov

Northern Border Regional Commission

The Northern Border Regional Commission (NBRC) was authorized in the 2008 Farm Bill. The Commission's focus is to help address the community and economic development needs of the most severely distressed portions of the Northern Forest region. The NBRC is an important new regional coordination mechanism for the northern border states as well as a potentially significant new source of investment for economic and community development in the region. Over $1 million in grant funding is available for projects throughout the Northern Forest states. Eligible projects must develop the infrastructure of the region; assist in providing job skills and employment related education; provide basic health care and other public services for areas that are severely economically distressed; promote resource conservation, tourism and recreation; or promote the development of renewable and alternative energy sources.

Grants in 2011 included the following:

Maine

$200,000 to the town of Van Buren toward the construction of a vegetable-processing plant to help expand markets for local farmers.
$50,000 to Northern Maine Finance Corp. in Caribou to establish a public-private partnership aimed at linking entrepreneurs with investors to grow business and jobs in Aroostook and Washington counties.

New Hampshire

$200,000 to Northern Community Investment Corp. for visitor information kiosks for tourists along Route 3 in New Hampshire's North Country.
$225,000 to the Grafton County Economic Development Council for construction of a business incubator in Plymouth.
$225,000 to the Mount Washington Valley Economic Council to extend the access road to the Technology Village off Route 16 in Conway.

Vermont

$128,500 to Lyndon State College and the Northeastern Vermont Development Association to create collaboration among Northeast Kingdom manufacturers and expand training programs.
$78,190 to the town of Brighton to build a 2,100-foot lakeside walking path that will connect to downtown to enhance tourism and recreation in the community.

New York

$250,000 to Clayton Local Development Corp. to install water and wastewater systems for the proposed $35 million Frink Hotel.
$95,320 to Lewis County Development Corp. to rehabilitate a railway spur that connects

to the former Lyons Falls Pulp & Paper mill site, which the agency is attempting to redevelop as a business park.

Vermont Resources

Loans

Local Development Corporation Loans

This program provides financing to nonprofit local and regional development corporations to build facilities for lease to identified eligible tenants, or to plan and/or develop industrial parks.

Eligibility

- All nonprofit local and regional development corporations (LDCs and RDCs).

Use of Proceeds

- Purchase of land for industrial parks;
- Industrial park planning and development;
- Construction or improvement of speculative buildings; and
- Small business incubator facilities.

Loan Rates and Terms

- Loan terms vary depending on the purpose of the loan. See current VEDA rates;
- VEDA must have a first mortgage on the land, leasehold or building, and appurtenances financed; and
- Industrial park loans cannot exceed 80% of the appraised fair market property value.

Fees

- 1% commitment fee;
- $1,000 minimum to $3,500 maximum;
- $18 flood insurance certification (if required);
- Document recording/discharge fees; and
- No application fee.

Application Process

- Loans up to $250,000 may be approved internally by VEDA staff;
- Loans exceeding $250,000 are presented to the VEDA Board for monthly consideration;
- Applicants are advised to discuss their proposed project with VEDA staff prior to submitting the application; and
- Applications may be downloaded or obtained from the VEDA office.

Municipal Planning Grant (MPG) Program

For many years, annual funding has been provided to support municipal planning projects. This support, in the form of grants, has helped draft and update town plans and bylaws. Grants are available to municipalities with a confirmed local planning process (download the list as a Word doc at: http://accd.vermont.gov/sites/accd/files/Documents/strongcommunities/cd/mpg/ConfirmedMunicipalities.doc). Municipalities without a confirmed local planning process may only apply for funding to obtain confirmation.

For more information, visit:
http://accd.vermont.gov/strong_communities/opportunities/funding/municipal_planning_grants

FY13 Applications are expected to be available in June 2012.
Wendy Tudor, Grants Administrator
802-828-5249

Vermont Community Development Program (VCDP)

The Vermont Community Development Program (VCDP) assists communities on a competitive basis by providing financial and technical assistance to identify and address local needs in the areas of housing, economic development, public facilities, public services, handicapped accessibility modifications.

Eligibility

Any Vermont town, city (except Burlington), incorporated village chartered to function as a general purpose unit of local government, or a consortium of such entities, is eligible for funding. However the majorities of projects are a coordinated effort between the municipalities, community groups and local or state non-profit organizations or small businesses.

Grant Types

VCDP provides federal Community Development Block Grant (CDBG) funding for eligible activities through the following application types:

- Accessibility Modification Grants (AM)
- Implementation Grants (IG)
- Planning Grants (PG)
- Scattered Site Grants (SS)

VCDP funds must primarily benefit persons of low and moderate income. In addition, assistance is provided to communities for threats of health and safety issues as urgent needs and slums and blight projects.

For more information, visit:
http://accd.vermont.gov/strong_communities/opportunities/funding/vcdp

For more information, contact:
Cindy Blondin, Grants Specialist
802-828-5219

Appendix C: Resources

The Clean Energy Economy: Repowering Jobs, Businesses, and Investments Across America. The Pew Charitable Trust. June 2009.
http://www.pewtrusts.org/uploadedFiles/Clean_Economy_Report_Web.pdf

de Morsella, Chris. Find Out Where the Green Job Are in Vermont. The Green Economy Post.
http://greeneconomypost.com/green-resource-center/green-jobs-careers/find-green-jobs-state/find-green-jobs-vermont.

Erickson, Erin. Innova Market Insights Announces Top 10 Food Trends for 2012. FoodProcessing.com. November 23, 2011.
http://www.foodprocessing.com/industrynews/2011/innova-top10-food-trends-2012.html.

Farm to Plate Strategic Plan. Chapter 3.4 Food Processing and Manufacturing. Vermont Sustainable Jobs Fund. 2011.
http://www.vsjf.org/assets/files/Agriculture/Strat_Plan/3.4_Food%20Processing.pdf.

Farm to Plate Strategic Plan Executive Summary. Vermont Sustainable Jobs Fund. July 2011.
http://www.vsjf.org/assets/files/Agriculture/Strat_Plan/F2P%20Executive%20Summary_6.27.11_Small%20File.pdf

Frej, Anne, et al. Business Park and Industrial Development Handbook. Washington, D.C.: ULI – the Urban Land Institute, 2001.

Economic and Labor Market Information. Labor Exchange Information Vermont Department of Labor.
http://www.vtlmi.info/laborexchange.cfm

Growing Talent: Meeting the Evolving Needs of the Massachusetts Life Sciences Industry. UMass Donahue Institute. 2008.
http://www.massbio.org/writable/files/LSTI_Report/report.pdf

Pellerito, Peter. How to Grow Jobs Through Biotech Industry Development. 2011.
http://www.bio.org/articles/how-grow-jobs-through-biotech-industry-development-0

Pernick, Ron, Wilder, Clint, and Winnie, Trevor. Clean Energy Trends 2012. March 2012. Clean Edge.
http://www.cleanedge.com/sites/default/files/CETrends2012_Final_Web.pdf

Renewable Energy in Vermont. American Council on Renewable Energy (ACORE). February 2011.
http://www.acore.org/files/pdfs/states/Vermont.pdf

Rosenfeld, Stuart. Sustainable Food Systems Cluster, Vermont Style. 2009.
http://rtsinc.org/publications/documents/VermontPlanningStudiesArticle.pdf

Selected Economic Characteristics. 2006-2010. American Community Survey 5 year estimates. U.S. Census Bureau.
http://www.census.gov/acs/www/data_documentation/data_main/

Taking the Pulse of Bioscience Education in America: A State by State Analysis. Battelle Technology Partnership Practice. 2009.
http://www.battelle.org/ASSETS/355747F27D534BFB91A51767F359BA0A/BioEd_09Summary_report.pdf

Technology, Capital and Talent: State Biosciences Initiatives 2008. Vermont Biosciences Alliance. 2008.
http://vtbiosciences.org/wp-content/uploads/VT_BIO_08.pdf

Vermont Commercial/Industrial Site Locator.
http://www.vtsitelocator.vermont.gov/

Vermont eighth-grade students above national average in science. Vermont Business Magazine. May 2012. http://vermontbiz.com/news/may/vermont-eighth-grade-students-above-national-average-science?utm_source=VBM+Mailing+List&utm_campaign=22ae43061f-Enews_5_10_20125_10_2012&utm_medium=email

Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities. Yellow Wood Associates and the Vermont Environmental Consortium. December 2009.
http://vecgreen.com/pdf/VEC_Report_on_VTs_Environmental_Sector.pdf

Vermont Statute Title 10: Conservation and Development, Chapter 12: Vermont Economic Development Authority, 10 V.S.A. § 212. Definitions
http://www.leg.state.vt.us/statutes/fullsection.cfm?Title=10&Chapter=012&Section=00212

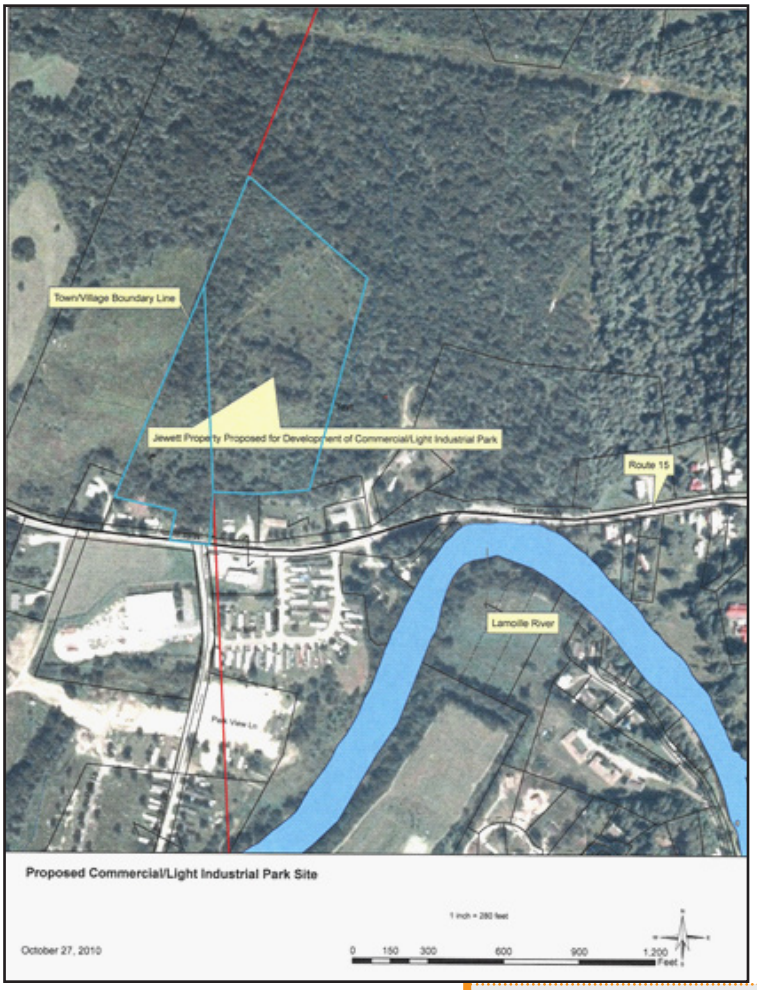
Zeuli et al. Non-agricultural Cooperatives in Rural Areas: Fourteen Case Studies. Case Study Series, University of Wisconsin Extension. 2003.
http://www.uwcc.wisc.edu/pdf/Case%20Studies/Non%20Ag%20Coops%20in%20Rural%20Areas.pdf

Appendix D: Spec Sheet & Interim Report

TOWN OF JOHNSON INDUSTRIAL PARK

The Town of Johnson Industrial Park is an opportunity to diversify Johnson's economic base and to create jobs. The planned commercial and light industrial park parcel is located at the west end of Johnson Village and has direct access to VT Route 15. The parcel is currently privately owned and the Town has an option agreement to purchase the parcel.

A detailed design plan for the park developed by Ruggiano Engineering of St. Albans, VT envisions a mixed use development consisting of commercial/light industrial lots and residential lots. The layout of the park provides for flexibility to develop the residential lots as commercial lots as well as to combine several commercial lots to accommodate businesses needing more space. All lots will be accessed by means of a common road and serviced by municipal water, sewer and electric utilities. The lots will be available for purchase.



The Park

Site acreage. 17
Available commercial lots. 5
Commercial lot size. . . . . 1.8 acres to 3.4 acres
Residential building lots. 5
Residential lot size. . . . . 0.46 to 0.78 acres
Proposed building size. . . . . 4,800 sq. ft. to 15,000 sq. ft
Ownership. . . . . Lots available for purchase
Land Use. . . . . Mixed use
Water. . . . . Municipal
Sewer . . . . . Municipal
Wastewater Capacity. . . . . 10,000 gallons per day
Electricity. . . . . Village of Johnson Water & Light Dept.
Information Technology. . . . . Comcast, Cable, DSL, Fiber Optic

Transportation

- 150 feet of road footage on VT State Highway Route 15
- Nearby State Highways: Route 100, Route 108, Route 109, Route 12
- State regional airport 10 miles from site in Morrisville

For more information, contact:

Duncan Hastings, Municipal Manager

802.635.2611
Johnson Municipal Bldg
293 Lower Main West
PO Box 383
Johnson, VT 05656

TOWN OF JOHNSON, LAMOILLE COUNTY, VERMONT

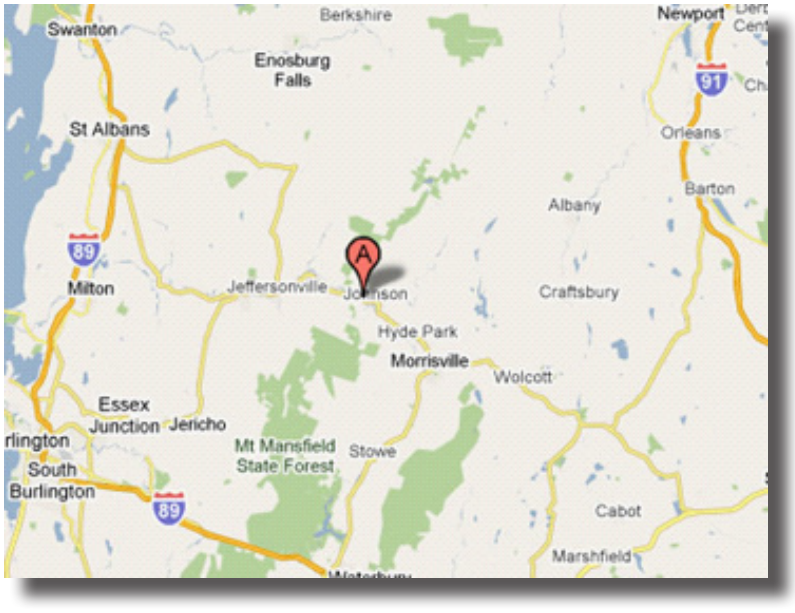
Johnson is a small rural town with a population of just over 3,000. It overlooks the Lamoille River Valley and is surrounded by some of the largest mountains in the state. Johnson boasts a lower crime rate than the national average. Copley Hospital, which was recently named one of the Top 100 Critical Access Hospitals in the nation, is only 8 miles away.

Education Creates Skilled Workforce

Educational opportunities are plentiful, with adult education offerings, Community College of Vermont (in Morrisville), Johnson State College, the Vermont Studio Center, and the Green Mountain Tech and Career Center. The average education level attained of Johnson residents is higher than the US average.

Infrastructure Improvements

Main Street revitalization is underway and in the last 10 years, four bridges have been replaced and sewer, water and electrical infrastructure have been rebuilt. A new municipal building and fire house have been built, and the elementary school has doubled in size. In 2003 Johnson was awarded second place in the EPA National Operations and Maintenance Excellence Award in the Small Advanced Category for Waste Water Treatment Facilities. Route 15 runs through town and is a state highway and a major corridor. Bridges on Route 15 are built to state highway standards. There is a new rail trail, which is expected to be an economic driver for the region.



Recreation

The Long Trail, which is part of the Appalachian Trail, runs through Johnson and three camps are located within town limits, making it easy to hike, climb, bike, camp, snowshoe, snowboard, and ski. There are many rivers, lakes and ponds nearby where you can swim, fish, kayak and canoe.

Nearby Ski Resorts

Smugglers' Notch Resort, 15 miles Jeffersonville

Stowe Mountain Resort, 22 miles
VT's highest peak, Mt. Mansfield at 4,395 feet above sea level

Jay Peak Resort, 40 miles
Boasts the most snow in the East

Nearby Cities

Burlington, 45 miles
Vermont's largest city overlooks Lake Champlain, the Adirondacks and the Green Mountains and offers shopping, art, music, theater, dining and is home to The University of Vermont.

Montreal, Quebec, Canada, 100 miles
This vibrant, international city is home to the NHL Canadians hockey team, a casino, museums, art galleries, restaurants, shops and other cultural and tourist destinations.

Prepared for

Town of Johnson
293 Lower Main West
PO Box 383
Johnson, Vermont 05656

Interim Report: Commercial/ Industrial Park Development and Market Demand

February, 2012

Prepared by

YELLOW WOOD
associates, inc.

Yellow Wood Associates, Inc.
228 North Main St.
St. Albans, Vermont 05478

Table of Contents

Figures and Tables

Introduction

The Town of Johnson has an option on a piece of land on which it would like to develop a light industrial/commercial park. The Town has already engaged the services of an engineering firm to develop a site plan for the proposed site. Now, the Town would like to know whether demand exists for space in a Johnson industrial park as currently designed, what amenities and infrastructure potential tenants demand, and, if sufficient demand exists, what Johnson's next steps should be in bringing the industrial park into being, including any possible changes in park design to address market demand.

The first steps in the market study are an overview of trends including demand for commercial/industrial space in Lamoille County and surrounding counties and a literature review of industrial park development in rural settings. The overview of trends includes federal, state and local data on demand for commercial/light industrial space in Lamoille and other surrounding counties; trends in cluster development within Vermont; and opinions of local economic development professionals on industrial/commercial development in Johnson.

It is our understanding that the Town of Johnson would purchase the land and develop the infrastructure to serve the park and sell the lots to expanding businesses. The literature review focused on this approach (versus turn-key parks, where the developer constructs the buildings, either on spec or for a specific tenant). Based on the review of literature, we have developed information relevant to Johnson about the steps involved in developing an industrial park, partnership options and information about trends, sequencing, financing, covenants and marketing.

Overview of Industry Trends

Trends around employment, industries and potential clusters in Lamoille County and surrounding counties provide the context within which we will identify specific industries to examine in greater detail for potential expansion into Johnson's proposed commercial/industrial park. We are looking for industries that are growing in Vermont and the counties surrounding Johnson, complement existing resources in Johnson, do not rely on foot traffic, may benefit from customized construction, have the potential to provide living wage jobs for Johnson residents and are tied to vibrant demand, including demand outside the state of Vermont.

Trends have been identified through a combination of literature review, secondary data collection, and interviews with economic development professionals and commercial real estate professionals in the area and around Vermont

Clusters

Industry clusters are defined as groups of inter-related industries. According to Harvard Professor Michael Porter, firms within a cluster must be linked, and groups of inter-linked companies locate in

close proximity to each other. "Clusters are geographically close groups of interconnected companies and associated institutions in a particular industry linked by common technologies and skills"[1].

Vermont Clusters

A February 2011 presentation[2] by Michael Porter shows that Vermont's leading clusters include:

- Education and Knowledge Creation
- Analytical Instruments
- Furniture
- Jewelry and Precious Metals
- Power Generation and Transmission.

Porter's presentation also outlines the difference between traded clusters, which serve markets in other regions and countries and are exposed to competition from other regions, and local clusters, which almost exclusively serve the local market and are not exposed to cross-regional competition for employment. Sixty-five percent of Vermont clusters are local clusters. The top local clusters in Vermont based on employment are local health services; local hospitality establishments; local real estate, construction and development; local commercial services; and local food and beverage processing and distribution. The top traded clusters in Vermont based on employment are business services, hospitality and tourism, education and knowledge creation, information technology and processed food.

Data from *Unlocking Rural Competitiveness* shows economic clusters in Vermont from 2010 based on total establishments, employers, and wages within the five surrounding counties.[3] Based on this data, top industry clusters include: Business and Financial Services; Biomedical/Biotechnical (Life Sciences); Arts, Entertainment, Recreation & Visitor Industries; Defense and Security; Agribusiness, Food Processing & Technology; Information Technology & Telecommunications. Within Lamoille County the top industry cluster based on total employees and wages is Arts, Entertainment, Recreation & Visitor Industries, but the highest number of establishments is within the Business and Financial Services sector.

Regional Clusters in Vermont

A study of Northeast Kingdom clusters[4] was completed in 2011 by Economic & Policy Resources, Inc. In this study, seven primary industry clusters were identified based on an analysis of various screening criteria of growth and expansion, competitiveness and more. These include:

- Agribusiness, food processing and technology.
- Biomedical and biotechnical (life sciences).

---

[1] Porter, Michael E., et al. (2001). *Clusters of Innovation: Regional Foundations of U.S. Competitiveness.* Council on Competitiveness.
http://www.compete.org/images/uploads/File/PDF%20Files/CoC_Reg_Found_national_cluster.pdf

[2] Porter, Michael E. 2011. Vermont Competitiveness: State and Cluster Economic Performance. Prepared for Governor Peter Shumlin. National Governors Association Winter Meeting. February 26, 2011.

[3] Unlocking Rural Competitiveness: The Role of Regional Clusters. (2007, January).
http://www.ibrc.indiana.edu/innovation/reports.html
Note: This data set groups industries differently than the Vermont Department of Labor statistics.

[4] Economic and Policy Resources, Inc. 2011. NVDA – Strategic Industries in the Northeast Kingdom. June 2011.

- Education and knowledge creation.
- Fabricated metals and machinery manufacturing.
- Forest and wood products.
- Visitor and tourism.

Similar clusters can be found in Chittenden County with some notable exceptions, like the presence of more high-tech and internet-based business clusters found in the Chittenden County area. Based on the Economic Base Analysis and Competitive Assessment performed for Chittenden County[5], 12 possible target clusters and industries have been identified for Chittenden County. These are:

- Information Technology
- Value Added/Sustainable Agriculture
- Digital Media
- E-Commerce
- Clean Tech/Green Technology
- Tourism
- Retail
- Non-profit Organizations
- Health Care
- Business and Administrative Services
- Value-Added Manufacturing
- Higher Education

Research on Specific Industry Clusters in Vermont

There has also been research in Vermont on very specific industry clusters, including the sustainable food system sector and the environmental sector. Stuart Rosenfeld[6] of Regional Technologies Strategies studied Vermont's sustainable food system cluster in his report "Growing Jobs, Vermont-Style: Skills and Knowledge for Vermont's "Sustainable Food System Cluster" and Natural Resources." According to Rosenfeld, a 2004 study of New England state agricultural and food clusters found that Vermont's concentration of employment in 2001 exceeded the national average by 50 percent or more in 10 of 12 food processing sectors, with the highest being chocolates and cacao (14 times the U.S. average) and dry, condensed, and evaporated dairy products (9 times the U.S. average)[7]. Furthermore, the employment gains in all of Vermont's agricultural and food sectors have outpaced national employment patterns suggesting that its growth can be attributed to more competitive businesses in the cluster. Due to its good roads and relative homogeneity, the geography of Vermont's clusters can extend to its borders and even into New York and New Hampshire. Rosenfeld explains,

---

[5] Draft #1 Chittenden County, VT Target Cluster & Industry Analysis. 10/19/2011. An ECOS Analysis Report. http://ecosproject.com/sites/default/files/documents/ECOS%20Draft%20%231%20Target%20Sector%20Analysis%2010-18-11.pdf

[6] Rosenfeld, Stuart. 2010. Growing Jobs, Vermont-Style: Skills and Knowledge for Vermont's "Sustainable Food System Cluster" and Natural Resources. Regional Technologies Strategies. http://rtsinc.org/publications/documents/VTReport_000.pdf

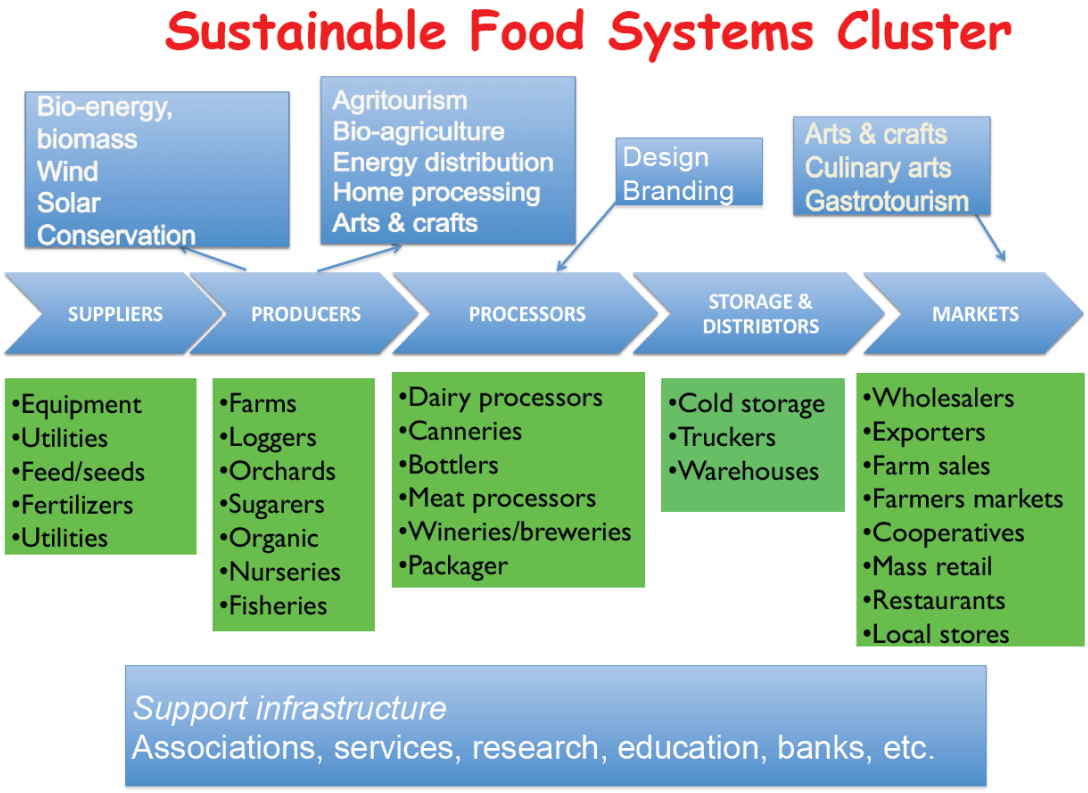
[7] Goetz, Stephan, Martin Shields, and Qiuyan Wang. "Agricultural and Food Industry Clusters in the Northeast U.S.: Technical Report," Regional Rural Development Paper No. 26, Penn State University, Northeast Regional Center for Rural Development, November 2004.

"When applied to food systems or natural resources, a cluster encompasses the full breadth of the value chains, from seeds, nutrients, fertilizers, and feeds through the processing, packaging, distribution, and marketing of what is produced. These clusters include all the companies that develop, produce, rent, sell or repair the capital equipment necessary for production. They include the sources of specialized technical and business assistance, knowledge, research and development, and organizational infrastructure that support the companies' capacity for learning, innovation, improvement, investment, and collaborative or associative behavior that enable clusters to achieve synergy."

Vermont's sustainable food system cluster employed 30,499 workers in more than 9,366 establishments in 2008. That same year, total wages for the cluster exceeded $1 billion, even based on conservative estimates from the Bureau of Labor Statistics.[8]

The strength of Vermont's sustainable food system cluster and Vermont's new Farm to Plate initiative, combined with the prevalence of farms in the Lamoille County area, speaks to the strong potential of a food cluster for the Johnson industrial park.

Figure 1[9]: Sustainable Food Systems Cluster



[8] Monitor Group, A Competitive Benchmarking of the Vermont Economy. Washington, DC: National Governors' Association Center for Best Practices, February 2007.

[9] *Source:* Rosenfeld, Stuart. 2010. Growing Jobs, Vermont-Style: Skills and Knowledge for Vermont's "Sustainable Food System Cluster" and Natural Resources. Regional Technologies Strategies. http://rtsinc.org/publications/documents/VTReport_000.pdf

The Vermont Environmental Consortium recently commissioned a study of the state's environmental sector.[10] That study found that 60% of surveyed firms in the sector export outside of Vermont and 20% export outside of the U.S. More than half of the firms in the environmental sector expect to grow in the next five years. For example, 65% of firms in the environmental consulting sub-sector export goods or services outside of Vermont - and 25% export outside of the United States. Other sub-sectors in which more than half of responding firms export outside Vermont, but within the U.S., include green building, green financing, green products, renewable energy, sustainable agriculture and forestry, and waste management. The sustainable agriculture and forestry sub-sector in Vermont has the highest percentage of firms exporting outside the U.S. The green products sub-sector had the highest expectation of growth, followed by the renewable energy, the energy efficiency, green building and then environmental consulting subsectors.

Cluster Focus

Table 1 shows the industry clusters that are found repeatedly in the Vermont and regional cluster studies. Outliers identified in fewer than three studies include: analytical instruments, jewelry and precious metals, nonprofit organizations, digital media, e-commerce, retail, furniture, local commercial services, defense and security, fabricated metals and machinery manufacturing, and value added manufacturing.

[10] Vermont Environmental Consortium and Yellow Wood Associates. 2009. Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities.
http://vecgreen.com/pdf/VEC_Report_on_VTs_Environmental_Sector.pdf

Table 1: Industry Clusters Found in Vermont and Regional Cluster Studies

Porter (VT, 2011)	Porter (VT, 2011) – Traded Clusters	Porter (VT, 2011) – Local Clusters	Unlocking Rural Competitiveness (VT, 2010)	Unlocking Rural Competitiveness (Lamoille, 2010)	NVDA (NEK, 2011)	Burlington (2011)
	Processed food	Local food and beverage processing and distribution	Agribusiness, Food Processing & Technology	Agribusiness, Food Processing & Technology	Agribusiness, food processing and technology.	Value added/sustainable agriculture
		Local health services	Biomedical/Biotechnical (Life Sciences)	Biomedical/Biotechnical	Biomedical and biotechnical (life sciences).	Health care
Education and Knowledge Creation	Education and knowledge creation			Printing & Publishing. Education and knowledge creation.	Education and knowledge creation.	Higher education
Power Generation and Transmission.		Local real estate, construction and development		Energy (Fossil and Renewable)	Forest and wood products.	Clean tech/green technology
	Hospitality and tourism	Local hospitality establishments	Arts, Entertainment, Recreation & Visitor Industries	Arts, Entertainment, Recreation & Visitor Industries	Visitor and tourism	Tourism
	Information technology		Information Technology & Telecommunications			Information technology
	Business Services		Business and Financial Services	Business and Financial Services		Business and Administrative Services

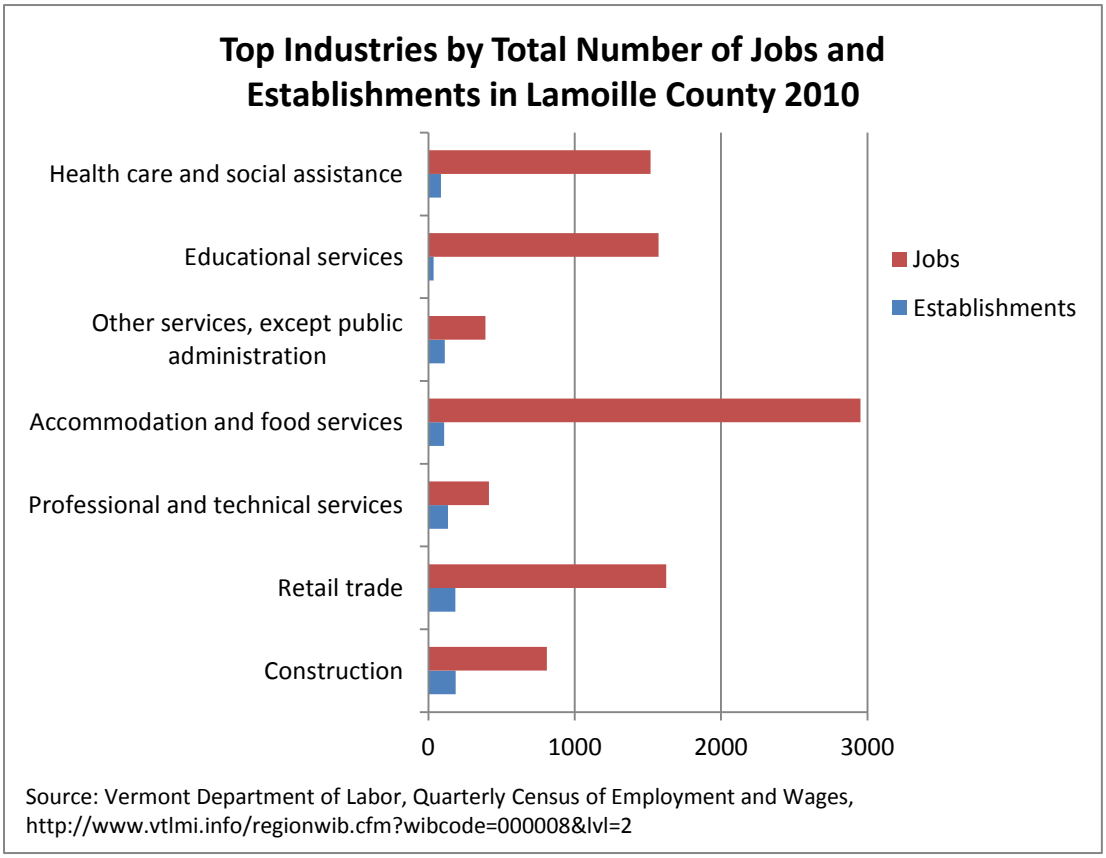
Based on the information in Table 1, there is overlap across data sources around the following sectors:

1. ***Agribusiness, food processing, and technology.*** In the Northeast Kingdom study, this cluster is labeled as a star cluster, given its high level of concentration and solid recent performance. This includes crop production; animal production; support activities for crop production; support activities for animal production; food processing and beverage manufacturing; agricultural chemical manufacturing; agricultural implement manufacturing; food product machinery manufacturing; farm and garden equipment merchant wholesalers; farm product raw material merchant wholesalers; farm supplies merchant wholesalers. Two significant portions of this cluster in the Northeast Kingdom are food and beverage manufacturing and conversion of agricultural products of livestock into intermediate or final products for sale.
2. ***Biomedical/biotechnical.*** This is made up of pharmaceutical and medicine manufacturing; optical instrument and lens manufacturing; electro medical apparatus manufacturing; analytical laboratory instrument manufacturing; irradiation apparatus manufacturing; medical equipment and supplies manufacturing; medical equipment merchant wholesalers; health and personal care stores; scientific research and development services; hazardous waste collection; hazardous waste treatment and disposal; and ambulatory health care services.
3. ***Education and knowledge creation.*** This includes education services; newspaper publishers; periodical publishers; book publishers; and other information services.
4. ***Energy and Environmental Services.*** This cluster includes suppliers of services, equipment and products which increase energy efficiency; as well as firms involved in providing access to and use of renewable energy (solar, wind, geothermal, hydropower, and biomass) sources through research and development, manufacturing and installation of renewable energy technologies. Environmental services includes professionals who provide technical and scientific expertise for a wide variety of environmental issues such as energy, remediation and restoration. This includes engineers, scientists and lawyers.
5. ***Information Technology.*** This cluster includes companies that computer services, including computer programming services, software development, data processing, internet services and computer facilities management.
6. ***Business and Financial Services.*** This includes subsectors including professional services, support services, computer services and miscellaneous business. Professional services including legal services, accounting, and management and technical consulting support organizations. Support services include credit reporting/collection firms, direct mail advertising, personnel supply services, and miscellaneous business services (detective, guards and protection services). All but miscellaneous business services can be "back office" functions. Computer services include computer systems, telecommunications, and software. Financial services includes banks, securities and financial investments and insurance carriers.

Jobs and Establishments – Lamoille County and Beyond

From clusters found in Vermont and the region, we explored data about jobs and employers in Lamoille County and its surrounding counties to learn more about conditions on the ground. Three sectors that are among the top industries in Lamoille County based on data from the Vermont Department of Labor are Accommodation and Food Services (potential beneficiary of an Agribusiness Cluster), Educational Services (related to the Education and Knowledge Cluster) and Professional and Technical Services. One to look at further is Professional and Technical Services, which includes a large total number of employees, but relatively few individual employers. Examples of businesses in this sector include: legal advice and representation; accounting, bookkeeping and payroll services; architectural, engineering and specialized design services; computer services; consulting services; research services; advertising services; photographic services; translation and interpretation services; veterinary services; and other professional, scientific and technical services. New opportunities may be available if some of the individual employers in professional and technical services are seeking to expand.

Figure 2: Top Industries by Total Number of Jobs and Establishments in Lamoille County 2010



Source: Vermont Department of Labor, Quarterly Census of Employment and Wages, http://www.vtlmi.info/regionwib.cfm?wibcode=000008&lvl=2

Lamoille County and Johnson are well positioned to attract employers and employees from beyond the county limits. The majority of staff at Johnson State College, for example, do not live in Johnson. Therefore, we decided to explore trends beyond Lamoille County, looking to its surrounding counties: Franklin, Chittenden, Washington, Caledonia, and Orleans. According to the Northern Vermont Occupational Projections for 2008-2018 from the U.S. Bureau of Labor Statistics, one frequent category

of jobs in northern Vermont is "bookkeeping, accounting, and auditing clerks" (part of the Professional and Technical Services sector).

According to the Vermont Department of Labor Economic-Demographic profile in 2011, top industries within the private sector in the five counties surrounding Lamoille County include: manufacturing; retail trade; and health care & social assistance. Lamoille County is distinct in that manufacturing is not a top industry, but instead accommodation and food service represent over one quarter of employment, significantly more than surrounding counties. The prominence of manufacturing in surrounding counties may offer opportunities for Johnson if firms seeking to expand are attracted to the Johnson park and area.

Economic Development Professionals

The Lamoille Economic Development Corporation is a private nonprofit corporation sponsored by Lamoille County businesses and municipalities as well as the State of Vermont. John Mandeville, their Executive Director, and David Hallquist, their Board Chair and CEO of Vermont Electric Coop, explained their approach to economic development which is focused on the three key areas of their mission: to strengthen the county's economy through the creation and expansion of jobs and businesses with a focus on **agricultural**, **tourism** and **web-based businesses**. Mandeville believes a Johnson commercial/industrial park should be focused on the area's strengths, which are in recreation and tourism and agriculture. There are food businesses that are developing a small cluster in Morrisville including Butternut Mountain Farm, Rock Art Brewery, Vermont Peanut Butter Company, and Mount Mansfield Creamery. Mandeville suggests building on this food-related cluster and potentially including forestry and renewable energy. According to Mandeville, web-based businesses are those who are either supplying internet access, are based exclusively on the internet (Inntopia, Par Springer-Miller, both in Stowe), use the internet as a significant driver of their business, or could not exist in this part of the world without good business-level broadband access (consultants, engineers, scientists, research firms). Using Mandeville's definition, these types of businesses would fit into either an Information Technology sector or a Professional and Technical Services sector.

David Hallquist[11], CEO of Vermont Electric Cooperative, was not sure a Johnson commercial/industrial park is the solution to Johnson's economic situation, despite the fact that he is hoping to expand into 500-1000 square feet of space at the park. He also believes the Laraway School may have a need for additional space soon. Finally, as Hallquist is involved in the local food center work in Johnson, he is mindful of the possibility of this park housing a local food center or some of its components as envisioned by the Lamoille River Food Cooperative group.

Ken Horseman[12], at the Vermont Department of Economic, Housing and Community Development, explained that over 90% of job creation in Vermont is going to come from existing businesses. Existing businesses will see the advantage in relocating to Johnson or expanding in Johnson if the conditions are right; those conditions are energy costs, human capital and skill sets. Horseman feels that the cluster analysis done for Northeast Kingdom (mentioned earlier) pertains to Lamoille County. He suggests that

[11] Personal communication with David Hallquist, CEO of Vermont Electric Cooperative, February 7, 2012.

[12] Personal communication with Ken Horseman, Vermont Department of Economic, Housing and Community Development, February 10, 2012.

the **agribusiness/food processing/technology cluster** could work in an industrial context in Johnson. The market for local food is huge right now. The Vermont Peanut Butter Company just moved from Waterbury to Morrisville; they are expanding at 40% per year. Horseman suggests that there is a real need for commercial refrigeration and storage, support activities for animal production, food processing and beverage manufacturing.

According to Horseman, there is also good energy around the **biomedical/biotechnical/life sciences cluster**; employment grew 2.1% in the decade from 2001-2009. Examples include optical instruments, lens development, and more. The third sector identified by the NVDA analysis was the **education/knowledge transfer cluster**, including publishers and higher education, which could also work in Johnson, with Johnson State College and the Vermont Studio Center. This cluster has seen a 20% increase in employment in the decade from 2001-2009.

Horseman explained that the key for all these sectors is human capital, which needs to drive economic development statewide, considering that Vermont has an aging population. If Johnson can provide the right skill sets, according to Horseman, companies will move to Johnson. Johnson should figure out how to utilize its educational institutions (including Johnson State College and the Green Mountain Tech Center) to provide the human capital needed for particular industries. Another strategy is to brand the Johnson commercial/industrial park as the greenest industrial park in the state.

Jim Black[13], a business professor at Johnson State College, mentioned a study by the Lamoille Economic Development Corporation on the impact of second homeowners in the area. The vast majority of second homeowners in the area are Vermonters, who may live in Montpelier or elsewhere and have a second home on Lake Elmore or in another recreation-oriented part of Lamoille County. However, there are second homeowners who come from out of state, who may be interested in moving their business to the area. Black mentioned a company from Pennsylvania that recently moved their operations to Stowe. Black suggests focusing on the quality of life aspects of the area, including recreation opportunities, lack of crime, good schools, etc.

Competition

Through conversations with local economic development professionals, we learned that there is park space available in North Hyde Park. These contacts felt that it may not make sense to consider a commercial/industrial park in Johnson, as there are industrial parks nearby such as in North Hyde Park that have open spaces yet to fill. Considering this fact, the question the Town of Johnson may want to ask is: What makes Johnson's park different from the industrial park down the road that has open space right now?

Similar to Johnson's proposed park, the North Hyde Park industrial park is marketing sites only. Each site is essentially "shovel ready" with on-site water and septic. John Mandeville[14] at the Lamoille Economic Development Corporation believes they have 4 unsold lots and are asking around $90,000 for each lot.

[13] Personal communication with Jim Black, Professor of Business at Johnson State College, February 10, 2012.
[14] Email communication, John Mandeville, Executive Director of the Lamoille Economic Development Corporation, February 22, 2012.

Steps in Developing an Industrial Park

Industrial park development is an economic development tool that allows a community to attract new and expanding businesses while controlling the terms of development (preventing development in conflict with community values and goals).[15] Commercial/industrial parks are multi-building developments that plan to accommodate a range of uses from light industry to office space. In general, these parks fall into three major categories, commercial, industrial and retail. More recently some parks have been developed around environmental standards (eco-industrial parks), business type (such as warehouse & distribution) or business clusters (such as information technology or agribusinesses).

The process of planning, designing, developing and managing industrial parks [16] typically goes through the following stages:

1. Identify a Site (complete)
2. Undertake a Site Engineering Study (complete)
3. Determine Feasibility and Understand Business Needs (in process)
4. Develop a Marketing Plan
5. Implement a Marketing Approach (Determine partnerships)
6. Obtain Financing (Determine partnerships)
7. Develop
8. Manage and Operate.

Identify a Site

The first step to designing an industrial park is locating a site that will be appealing to potential tenants. The Town of Johnson has an option on the Jewett property, which features a good location and access to a wide variety of infrastructure services.

Undertake a Site Engineering Study

Industrial parks should have preliminary engineering plans for the location of utilities and infrastructure, a site plan showing the size and configuration of individual parcels within the property (which can be modified to suit an individual company's needs), preliminary environmental and historical assessments,

[15]Grunkemeyer, e. a. (n.d.). *Community Preparedness for Site Development.* Retrieved January 2012, from The Web Book of Regional Science: Regional Research Insitute, West Virginia University: http://rri.wvu.edu/WebBook/Thomas/development1.html Community Preparedness for Site Development is a "Web Book" developed by the Regional Research Institute at West Virginia University. This is a useful tool that is designed to help communities prepare for development (such as an industrial park). This source is particularly valuable because it is written for communities (not developers, cities, or even economic development organizations). Because of this, we have incorporated much of the content into this document, making adaptations to the content, where appropriate, to meet the specifics of Johnson's location, site and goals.

[16] Frej, A. e. (2001). *Business Park and Industrial Development Handbook.* Washington, D.C.: ULI - the Urban Land Institute. http://www.uli.org/ResearchAndPublications/Reports/~/media/Documents/ResearchAndPublications/Reports/Ten Principles/TP_Partnerships.ashx, page 4.

and stated general conditions related to the sale or lease and use of the property.[17] (See section on Covenants, Conditions and Restrictions).

The Town of Johnson has already engaged the services of Ruggiano Engineering, Inc. in St. Albans to conduct a Commercial/Industrial Park Feasibility Study in April 2010. The site evaluation included a review of the existing topography, site access, soil conditions and other natural development constraints such as wetlands and wildlife habitat. Locations and availability of nearby utilities, such as municipal water supply and wastewater disposal, were evaluated. A review of the scope of necessary permits for a commercial/industrial park was performed, including a meeting with the District Act 250 Coordinator to discuss potential permitting hurdles. Based on the development constraints identified, Ruggiano developed conceptual park layout plans to depict possible park configurations. Finally, estimated site construction and other project costs were assembled for the conceptual access road, common utilities and the anticipated permitting and development scope.

Determine Feasibility and Understand Business Needs

There are two major components to consider when assessing the feasibility of an industrial park: market analysis, which defines the market and identifies potential demand; and financial feasibility, which determines the profitability of a proposed investment. The goal of the market analysis is to confirm that there is demand from targeted industries for the selected site. The financial feasibility analysis predicts whether the development will generate enough cash flow to pay the debt service (and provide an adequate return).[18]

Market Analysis

The market analysis, which Yellow Wood is working on now, seeks to determine which industries the Town of Johnson will go after and what type of park they should develop (based on available workforce skills, labor availability, infrastructure, etc.) to attract the targeted industries.[19] As shown earlier in this report, Yellow Wood Associates has already begun to identify potential target industries. The next step will be to match the capacities of the site and the community with the target sectors, while also addressing any capacity deficiencies and conveying a willingness to meet the needs of specific companies.[20]

---

[17] Grunkemeyer, e. a. (n.d.). *Community Preparedness for Site Development.* Retrieved January 2012, from The Web Book of Regional Science: Regional Research Insitute, West Virginia University: http://rri.wvu.edu/WebBook/Thomas/development1.html

[18] Frej, A. e. (2001). *Business Park and Industrial Development Handbook.* Washington, D.C.: ULI - the Urban Land Institute., page 39.

[19] Deloitte & Touche Fantus. (2001, October). *Industrial/Business Park Standards: Rural Regions.* Retrieved January 2012, from http://www.neded.org/files/businessdevelopment/library/ruralregion.pdf

[20] Grunkemeyer, e. a. (n.d.). *Community Preparedness for Site Development.* Retrieved January 2012, from The Web Book of Regional Science: Regional Research Insitute, West Virginia University: http://rri.wvu.edu/WebBook/Thomas/development1.html

Making sure the project serves the target market well is the first basic element of marketing. To do this it is important to answer these questions:[21]

- Who are the target markets?
- What project features and amenities do these groups want?
- Based on market conditions and the products in the market, what are target occupants willing to pay?
- What are competitive projects offering?

Yellow Wood Associates will be answering these questions in the next phase of our work. One idea to consider is that combined business/industrial parks allow for a greater variety of occupants and are more likely to be filled in rural areas where it may be difficult to support separate industrial or business parks. [22]

Business Requirements

According to Grunkemeyer, et al., businesses considering a site within an industrial park have several basic requirements; a community should be prepared to meet these requirements to be competitive in attracting businesses to such a park. The basic requirements include:

Site Specific

- Transportation and Accessibility – Proximity and availability of transportation networks. Highway access and traffic patterns. Industrial tenants are usually interested in a 10 mile radius from the highway.
- Utilities – Adequate water, sewer, power and telecommunication services must be available in the quantity and quality required to serve business and industry (see section on Infrastructure).
- Appropriate Land Use and Zoning – Site is zoned appropriately for the type of end use projected.
- Ownership – The Town should have clear site control with a state price per acre based on the fair market value of industrial, commercial or retail property in the region.
- Topography and Soil Conditions – Level sites with good drainage. Sites with limestone, caves or wetlands should be avoided.
- Additional Studies – A Phase 1 Environmental Assessment should be conducted to identify any environmental concerns that warrant further study.

Community/State Specific

- Available Labor Force – Identify labor market.
- Incentives – Potential businesses should be made aware of community and state incentives available.

---

[21] Frej, A. e. (2001). *Business Park and Industrial Development Handbook*. Washington, D.C.: ULI - the Urban Land Institute., page 149.

[22] Deloitte & Touche Fantus. (2001, October). *Industrial/Business Park Standards: Rural Regions*. Retrieved January 2012, from http://www.neded.org/files/businessdevelopment/library/ruralregion.pdf

Companies seeking new sites are often motivated by the need to minimize costs of operation and/or the need to access adequate labor markets. Once a community determines that industry/business attraction is a strategy worth pursuing and establishes goals regarding the types of companies that would benefit the community, it is important to figure out how to best develop relationships with companies seeking a site. Companies are seeking communities that are willing to partner with them to reduce their risk of doing business. These risks can be organized into four areas: profit, workforce, infrastructure and timing.[23]

Once the target industries have been identified, the Town should understand the site requirements specific to those industries. The Town should be prepared to provide information about the sale price, business climate, expansion/growth potential on the site, history of the site, labor climate in the region, physical characteristics of the site, applicable regulations, transportation, utilities and other infrastructure. A complete list of information and requirements general seekers are looking for is located in Appendix E.

According to the 2010 Corporate Survey[24] by Area Development Site and Facility Planning, the primary reasons for companies to increase their facilities were new markets, increased sales/production and new product lines. Thirty-four percent of respondents planning to open new facilities were in the manufacturing sector and 30% in the warehouse/distribution sector. The primary reasons companies gave for relocating were proximity to suppliers/markets served (41%), need for improved business climate (19%) and operating costs (16%). The top ten factors affecting site selection were:

1. Highway accessibility
2. Labor costs
3. Tax exemptions
4. Occupancy or construction costs
5. State and local incentives
6. Corporate tax rate
7. Availability of skilled labor
8. Inbound/outbound shipping costs
9. Energy availability and costs
10. Availability of buildings

The top three quality of life factors considered in selecting a site were low crime rate, healthcare facilities and housing costs.

[23] Grunkemeyer, e. a. (n.d.). *Community Preparedness for Site Development.* Retrieved January 2012, from The Web Book of Regional Science: Regional Research Insitute, West Virginia University: http://rri.wvu.edu/WebBook/Thomas/development1.html

[24] Area Development Site and Facility Planning. (2010). *25th Annual Corporate Survey*. Retrieved February 2012, from Area Development Site and Facility Planning Online: http://www.areadevelopment.com/AnnualReports/jan2011/corporate-consultants-survey-site-selection2011-39290.shtml#

Develop a Marketing Plan

Once the Town has identified the target market and answered the key questions about the site, it makes sense to put together a marketing team with a capable lead person who will be the contact for information about the community and site for potential businesses. More information on key members for the marketing team can be found in Appendix D. The next step for the team is to develop a marketing plan. The marketing plan should:

- Convey the goals the community expects from developing the site.
- Identify roles and tasks for members of the marketing team.
- Allow for an ongoing effort to work with existing businesses (a sound retention and expansion plan for existing businesses is a necessary component of the marketing approach as prospective businesses will contact existing ones to assess the business climate of the community).
- Include a description of the project, the financial goals, pricing structures and specific marketing programs (including activities, partners, schedule and budget).[25]

Once the marketing team and marketing plan are in place, the Town needs to identify partners to assist with promoting the project. These partners might include: State and Regional Economic Development Groups, Utility Development Offices (such as electricity providers), Location Consultants, Private Developers and Commercial Real Estate Firms.

Marketing an industrial park is a multi-step process that revolves around creating an identity or niche for the development, identifying target users, convincing them the site meets their needs, and finally, negotiating the terms of the lease or sale.[26] Local economic development agencies often take the lead on marketing municipally owned industrial parks. Marketing the park should start as soon as the Town has purchased the land and identified the targeted industries, clusters or businesses. This often happens in parallel with financing and infrastructure development. At one industrial park in Arkansas, the Economic Development Board (responsible for developing the park) signed on three businesses while they were raising money to put in the basic infrastructure.[27] Getting early commitment from occupants can help to raise the money necessary for the infrastructure development.

Due to Johnson's proximity to two large ski resorts (Stowe and Smugglers Notch) and associated second home development, it may make sense to survey second homeowners in Johnson and surrounding towns to learn more about this potential market.

---

[25] Frej, A. e. (2001). *Business Park and Industrial Development Handbook.* Washington, D.C.: ULI - the Urban Land Institute., pages 151-152.

[26] ibid., page 149.

[27] Sitton, R. (1993, May). *I-440 Industrial Park Grant Approved.* Retrieved February 2012, from http://www.uamont.edu/facultyweb/sitton/pf/i440.html

Obtain Financing

The Town will need to identify funding and financing for costs associated with purchasing the land, planning, engineering and design fees, infrastructure costs and debt service. Potential revenue sources for the Town include[28]:

1. Initial Land Sales – The community can agree with the current property owner that revenues from the initial land sales will go directly to the owner. This reduces the upfront cost requirements of land acquisition.
2. Government Bonds.
3. Loans – Loans can come from a variety of sources ranging from local and national banks to USDA Rural Development.
4. Grants – There may be federal and state programs to finance public infrastructure and site development. The US Economic Development Administration has provided this type of funding in the past.
5. Utility Companies – Some utility companies will provide planning funds to communities developing sites within the service area.

Case Study: North Little Rock Industrial Park

In 1993, after three years of planning (and waiting), North Little Rock, Arkansas, received federal funding to provide infrastructure and utilities to the North Little Rock Industrial Center. The city received a $465,600 matching grant from the Economic Development Administration for the development of the infrastructure. Additional revenues included $300,000 from the Electric Department budget to extend a transmission line to the property 465,000 in the wastewater utility to bring a sewer line to the property and $50,000 from the city's General Fund.

The private property owner and the city jointly marketed the Industrial Center. In this public/private partnership, the landowner decreased the size of the park by 38 acres to save wetlands and donated 62.5 acres to the city, including a road and right of way, for the infrastructure. The land was privately marketed by the Hathaway Group (providing commercial real estate services) and expected to sell all of the available land in the 262-acre park four years after the infrastructure improvements were completed.

Source: Sitton, R. (1993, May). *I-440 Industrial Park Grant Approved.* Retrieved February 2012, from http://www.uamont.edu/facultyweb/sitton/pf/i440.html

Case Study: Emmetsburg Business Park

Construction of a new road and underground facilities for the Emmetsburg Business Park began after two years of planning in 2008. The City of Emmetsburg paved the road to the new business park with a $180,000 matching funds grant from the Iowa Department of Transportation. Emmetsburg Municipal Utilities provided water gas and sewer to the development. The Emmetsburg Community Development Corporation (ECDC) purchased the land (64 acres) to be developed as a business park with a $485,000 Community Facilities Loan from USDA and a $200,000 guaranteed loan from a local bank (Iowa Trust Bank). This three-way partnership is being marketed by the Emmetsburg community developer and has sold 13 of the 59 available acres.

Source: Infrastructure Overview. (n.d.). Retrieved February 2012, from Emmetsburg Business Park: http://www.emmetsburgbusinesspark.com/overview.php#infrastructure

Some municipalities developing industrial parks establish Tax Increment Financing (TIF) districts to generate funds to help pay down the infrastructure debt. With a TIF, a portion of property taxes from developed parcels in the TIF district is used to pay the infrastructure debt. With a TIF, the Town is able to issue bonds secured by all, or a portion of, increased real estate taxes generated by the development in the new District (at the industrial park). This allows the Town to finance the infrastructure without incurring general obligation debt. [29] Detailed information about Vermont's TIF program can be found at: http://www.dhca.state.vt.us/TIF/tif%20homepage.htm

The Town should work to combine local investment with state and government grants. It is possible, depending on the type(s) of partnerships the Town pursues in the development of the industrial park, to have a private partner finance some of the development costs. For more about financing the development with partners, refer to the section on Partnerships.

---

[28] Adapted from Grunkemeyer, e. a. (n.d.). *Community Preparedness for Site Development.* Retrieved January 2012, from The Web Book of Regional Science: Regional Research Insitute, West Virginia University: http://rri.wvu.edu/WebBook/Thomas/development1.html

[29] Shea, J. R. (2008, November 24). The Role of Municipalities in Public Private Partnerships. *Banker & Tradesman: The Real Estate, Banking and Commercial Weekly for Massachusetts* .

Develop

There are many options to explore in developing an industrial park, ranging from purchasing the land only (with the rest of the project completed by a private developer) to the design and construction of turn-key spaces ready to be occupied. The Town of Johnson has already decided to purchase the land and develop the infrastructure required for the industrial park.

Infrastructure

Target industries and businesses should be considered when designing and developing the infrastructure for an industrial park. Roadways need to take into account the size and frequency of truck traffic; water and sewer requirements can range from low capacity (up to 4" lines) to high capacity (8"-12" lines); there is a range of potential electricity distribution and transmission sizes as well as telecom capabilities.[30] In Johnson, the water and wastewater services are maintained by the Village. The infrastructure offerings of several industrial parks can be found in Appendix F.

Manage and Operate

In a review of existing parks, we found that the management, operation and ongoing marketing of municipally owned industrial parks is often undertaken by a local economic development organization.

Case Study: Mint Farm Industrial Park

The Mint Farm Industrial Park is a public / private partnership between the City of Longview and a private real estate development company (WREDCO) to develop an industrial park that creates new opportunities for economic development in the region. This project received $1.4 million in ARRA money from the department of commerce to provide public infrastructure to provide transportation and utility access to 137 acres of privately owned property. The infrastructure project will construct a new road to approximately 2500 LF long and 40 feet wide, including concrete curb and gutter, sidewalk, storm drainage, street lighting and landscaping. The sewer and water utilities will be extended to serve the proposed developments.

Source: The Mint Farm.
http://www.mintfarm.com/home/index.php

Case Study: Lindale Industrial Park

In Lindale Texas, after several years of planning, the Local Economic Development Office secured an $850,000 matching grant from the US Department of Commerce Economic Development Administration for infrastructure development at the 120-acre Lindale Industrial Park. The grant will cover the construction of a 40-ft wide concrete spine road through the park providing access to all of the parcels expected to be developed as well as water, wastewater, storm drains, street lights and an entry sign. In addition to the grant, Lindale Economic Development officials, along with the City of Lindale sought to establish a Tax Increment Financing (TIF) district for the park and surrounding area so as to generate funds to help develop additional parcels in the vicinity of the Industrial Park.

Source: Clary, J. (2011, May 18). *Construction of infrastructure in Lindale Industrial Park has begun.* Retrieved February 2012, from the right corner of texas: http://therightcorner.com/news/construction-infrastructure-lindale-industrial-park-has-begun

Additional Issues to Consider

Covenants, Conditions and Restrictions (CC&Rs)

Covenants, conditions and restrictions are types of private land use controls and standards often used when most of the occupants own their own building.[31] Covenants specify what a tenant can and cannot do in the park or on the site, including the possible exclusion of certain types of businesses and certain

[30] Deloitte & Touche Fantus. (2001, October). *Industrial/Business Park Standards: Rural Regions.* Retrieved January 2012, from http://www.neded.org/files/businessdevelopment/library/ruralregion.pdf

[31] Frej, A. e. (2001). *Business Park and Industrial Development Handbook.* Washington, D.C.: ULI - the Urban Land Institute. http://www.uli.org/ResearchAndPublications/Reports/~/media/Documents/ResearchAndPublications/Reports/TenPrinciples/TP_Partnerships.ashx. p.14.

types of structures. These covenants are attached to the deed and place legal restrictions on the property in perpetuity.[32]

While covenants should be effective in ensuring that a business that is not a good neighbor will not locate in the park, fewer development restrictions allow more flexibility for constructing a facility and managing a business.[33] Developers of the Cape Charles, VA Eco-Industrial Park found that the criteria developed in order to classify the development as an industrial park greatly limited the number of potential businesses that were interested, or even eligible, to operate in the park. [34]

Covenants and restrictions are very important to the appearance, operation and quality of the industrial park. It is in the CC&Rs that the Town has the opportunity to identify which types of uses are permitted, which require certain conditions and which are prohibited. The CC&Rs often include setbacks, design restrictions, landscaping and maintenance requirements as well as an option for the owner to buy-back or "recapture" land in the park. A list of issues addressed in three sample covenants (written for properties in which the Town, Village or City owned the park and sold lots) is available in Appendix H. Johnson will want to consider the role of covenants in its Park.

Partnerships

The development of an industrial park will likely require, or benefit from, one or more partnerships between the municipality and others, ranging from local and state economic development organizations to utility providers to private developers. Most communities have entered into private-public partnerships in working with businesses. Government involvement is still need for most projects, especially site development. Local government usually provides the necessary infrastructure and permits and can assist in securing permits and assistance from higher levels of government.[35]

Public-private partnerships (PPP) take many forms for many purposes and should be considered, "approaches or methods rather than ends or objectives in and of themselves." [36] Public / Private Finance and Development by John Stainback, identifies six ownership and investment scenarios, 1) Public Partner as Sole Owner; 2) Public Partner as Sole Owner but Outsource Design; 3) Public Partner as Controlling Interest in Partnership; 4) Nonprofit as Owner; 5) Private Partner Bears Risk Burden; and 6) Private Developer as All-Encompassing Partner and three main types of PPPs on the same spectrum from Major Private Developer Participation to Public Partner is primarily responsible for the project. In the latter, the public partner is primarily responsible for financing the project and outsources design,

---

[32] Grunkemeyer, e. a. (n.d.). *Community Preparedness for Site Development.* Retrieved January 2012, from The Web Book of Regional Science: Regional Research Insitute, West Virginia University: http://rri.wvu.edu/WebBook/Thomas/development1.html

[33] Deloitte & Touche Fantus. (2001, October). *Industrial/Business Park Standards: Rural Regions.* Retrieved January 2012, from http://www.neded.org/files/businessdevelopment/library/ruralregion.pdf

[34] Lambe, W. (2008). *Small Towns Big Ideas: Case Studies in Small Town Community Economic Development Infrastructure.* North Carolina: UNC School of Government - N.C. Rural Economic Development Center., page 33.

[35] Grunkemeyer, e. a. (n.d.). *Community Preparedness for Site Development.* Retrieved January 2012, from The Web Book of Regional Science: Regional Research Insitute, West Virginia University: http://rri.wvu.edu/WebBook/Thomas/development1.html

[36] Mullin, S. (2002). *Public-Private Partnerships and State and Local Economic Development: Leveraging Private Investment.* U.S. Economic Development Administration.

development, construction and/or facility management to the private sector.[37] Stainback identifies ten advantages of PPP and eight disadvantages from the perspective of the public partner.

Advantages[38]:

1. Facilitated Action by Both the Public and Private Partners to Proceed with the Project
2. Reduced Ownership, Development, and Operational Risks
3. Generating Nontax Income or Private Financing of a Needed Public Facility
4. Monetizing Excess or Under-Performing Government-Owned Real Estate Assets
5. Optimizing Private Equity and Debt Financing, Reducing the Investment Required from the Public Partner
6. Eliminating or Reducing Government-Issued Debt, Thereby Saving Debt Capacity for Essential Services or Facilities
7. Fully Utilizing Private Partner Expertise and Creativity in Finance, Design, Development, and Facility Management
8. Generating Long-Term Commitment by the Investor(s) and/or Operator through Private Investment
9. Generating Tax Revenue from Land and/or a Project That Would Not Proceed without a PP Partnership
10. Completing the PP Partnership Process and Forcing the Project to be Market Driven and Financially Feasible to Build

Disadvantages[39]:

1. Reducing the level of control over the design, delivery and building quality as well as the use of the facility in some instances
2. Reliance on the competitively selected developer to obtain all or a portion of the financing, manage the construction and successfully operate the facility
3. Possibility of structuring a partnership that is not a fair sharing of costs, risks, responsibilities and economic return
4. Private Ownership entity often has the right to sell the project to a third party unknown to the public partner
5. Economic return to the public partner for capital and noncapital investment(s) is often highly dependent on the performance of the private partner ownership and facility management entities.
6. Predevelopment process can be placed under a microscope by the media, administration and others
7. Any private partner has the right to protest the developer selection process
8. Selection of a private developer based in a city or state other than the public partner can be contentious

The Town should consider these advantages and disadvantages when deciding on whether and what type(s) of partnership(s) to form. When, considering a partnership agreement, it is critical for the Town

[37] Stainback, J. (2000). *Public/Private Finance and Development.* New York: John Wiley & Sons., pages 6-11.

[38] ibid, page 20.

[39] ibid, page 23.

to understand and feel confident of the, "(1) contractual allocation of costs, risks, responsibilities and economic, fiscal, and financial returns and (2) the enforcement of these contractual arrangements during the timeline of the project."[40]

Timeline/Sequencing

Table 2: Industrial Park Development Timing (adapted from Deloitte & Touche Fantus[41])

Development Activity	**Timing**		
	Short Term (6 months)	Middle Term (within year 1)	Long Term (1 year +)
Decision Process (whether to develop a park, what type of park, what industries to be targeted)			
Planning / Engineering			
Zoning			
Financing			
Infrastructure Construction			
Marketing			

Economic development professionals we spoke with, including Tim Smith of the Franklin County IDA and John Mandeville of the Lamoille Economic Development Corporation, agreed that industrial parks in Vermont can take up to 10 years or more to fill. This may be a long process, in which the Town of Johnson may not see overall economic benefits for several years.

Challenges

The Town of Johnson is offering undeveloped sites for expanding businesses. The Park will likely not appeal to business start-ups or businesses seeking "ready to go" buildings or incubator space. According to Deloitte and Touche Fantus, a consulting firm hired by the Nebraska Department of Economic Development to provide site standards for industrial parks in rural regions, having a "ready to go site" is

[40] Mullin, S. (2002). *Public-Private Partnerships and State and Local Economic Development: Leveraging Private Investment.* U.S. Economic Development Administration., page 16.

[41] Deloitte & Touche Fantus. (2001, October). *Industrial/Business Park Standards: Rural Regions.* Retrieved January 2012, from http://www.neded.org/files/businessdevelopment/library/ruralregion.pdf, page 10.

very important in attracting companies. Their data shows that more that 75% of manufacturing site seekers and close to 100% of back-office site seekers initially seek available facilities (buildings that have already been developed).[42] It remains to be seen how strong the demand will be for undeveloped sites.

Recommendations for Moving Forward

Based on the above and the location of the Jewett property, we have some recommendations for the best ways to move forward with the remainder of the research.

1. **Focus on business expansion and relocation.** Because the Town is willing to provide infrastructure to the property, but the business would need to invest in the building, it is unlikely that a start-up or an entrepreneur would be interested in a parcel in the park. This is a significant investment for a new business. We feel that it is more likely a parcel in this commercial park would be attractive for an existing business that has been operating at a smaller scale, but is ready to scale up. These could be businesses in and around Lamoille County or businesses from elsewhere that may be interested in the recreation and quality of life opportunities provided by Lamoille County.
2. **Sectors to further investigate.** Based on the trend data and the conversations we have had, the sectors that appear to have the greatest potential are:
    a. Agribusiness, food processing and technology
    b. Biomedical/biotechnical
    c. Energy and environmental services businesses
    d. Information technology
    e. Business and financial services

    We recommend more detailed best practices research to learn more about what businesses in these sectors are seeking in commercial/industrial space and what sectors may be co-located in a commercial/industrial park.
3. Understand timing realities. Based on the conversations we have had with industrial development directors in other counties, there are realities that the Town of Johnson should be aware of. One is that it is likely that it could take several years to fill out this commercial/industrial park with tenants.

Next Steps

The next steps in the market study include the following:

1. ***Selecting sectors.*** We will determine, with input from the Selectboard, which three sectors on which to focus the remainder of the research.
2. ***Further investigation into the chosen sectors.*** To learn more about each sector, we will conduct interviews with staff of membership and affiliation organizations for the three

[42] Deloitte & Touche Fantus. (2001, October). *Industrial/Business Park Standards: Rural Regions.* Retrieved January 2012, from http://www.neded.org/files/businessdevelopment/library/ruralregion.pdf

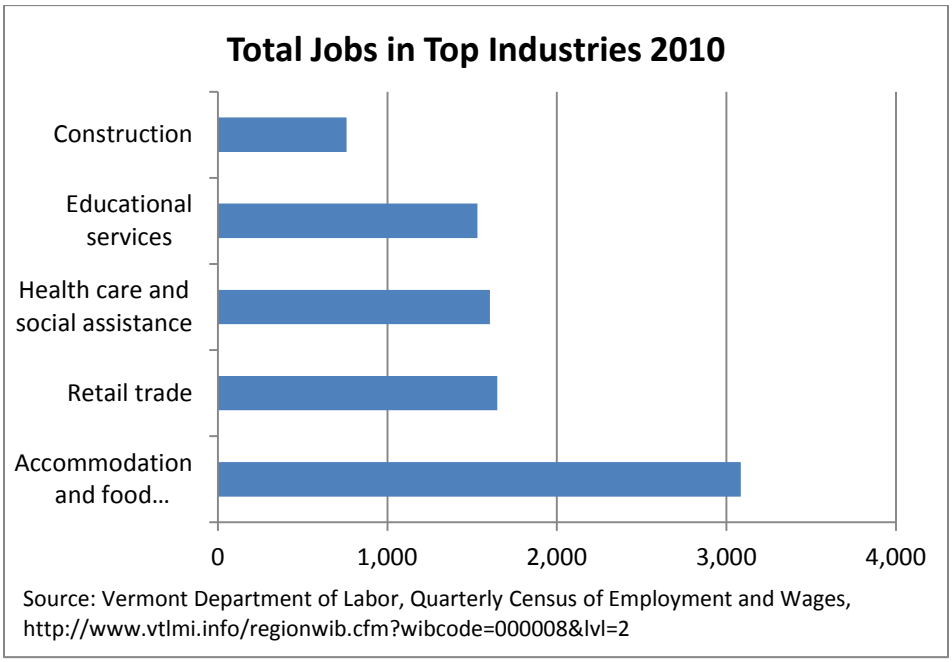
sectors. Interviews will ask about the needs of each sector for space, infrastructure, services, etc. We will also ask for suggestions of businesses that may be considering expansion in Lamoille County and beyond.

3. ***Research on potential tenants.*** Once we better understand the needs of each sector, we will begin to scope out those existing businesses both within Lamoille County and in its surrounding counties that might be interested in a location in a Johnson commercial/light industrial park. We will develop a survey instrument to be used in phone surveys of potential tenants, which will ask about current space needs, expected future space needs, time frame for decision-making, infrastructure required, financing required, technologies required and more. We will learn more about their needs and desires for a business location and whether they may be interested in a site at a Johnson commercial/industrial park.

Appendices

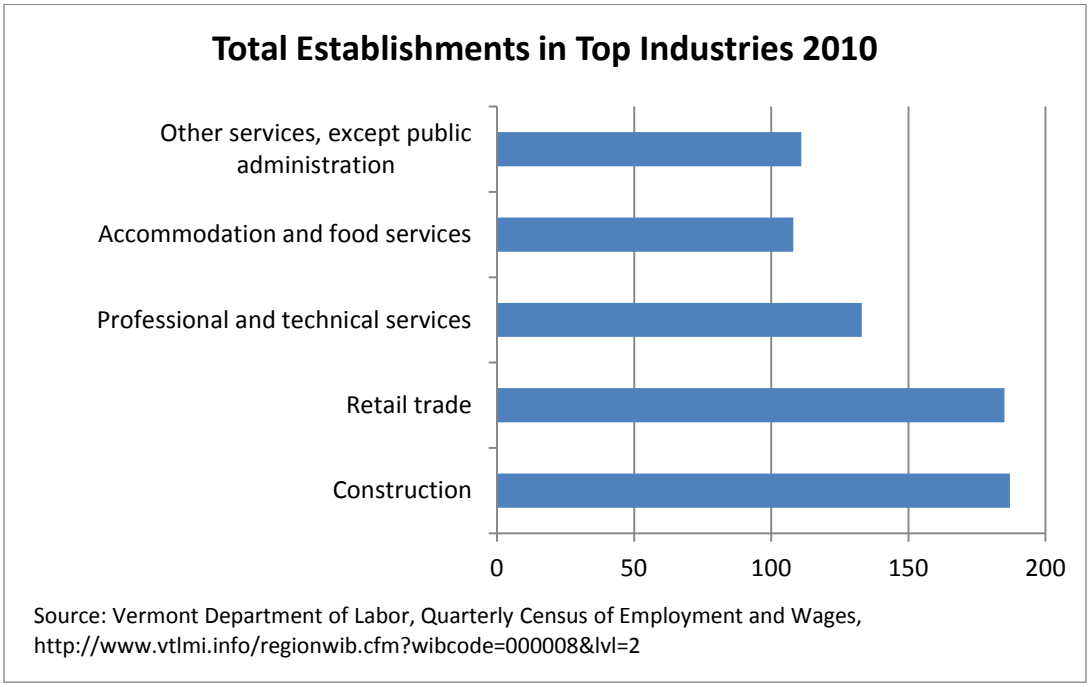
Appendix A - Additional Information on Industries in Lamoille County and Surrounding Counties

Figure 3: Total Jobs in Top Industries 2010



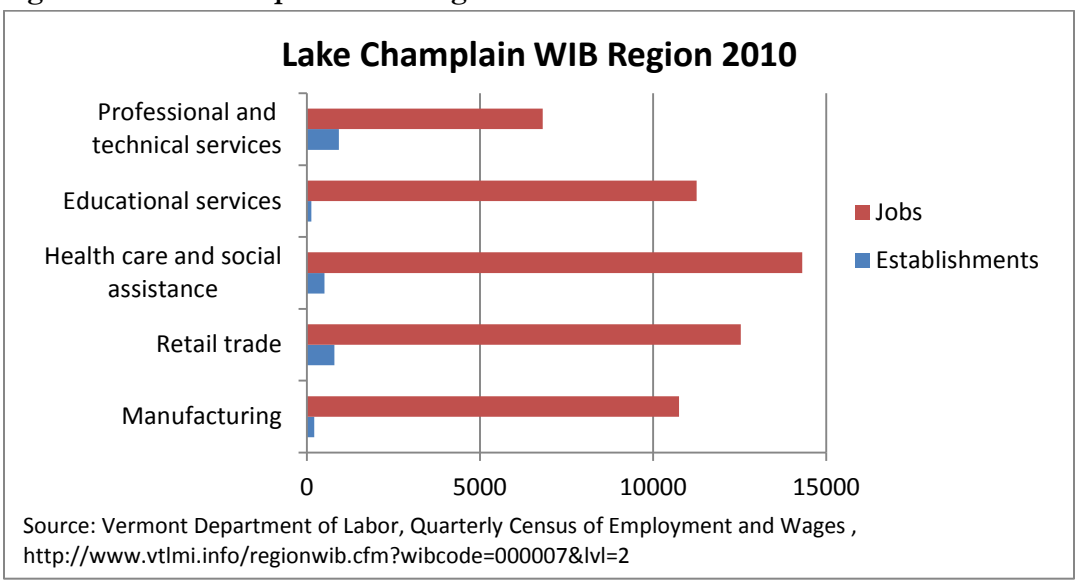
Source: Vermont Department of Labor, Quarterly Census of Employment and Wages, http://www.vtlmi.info/regionwib.cfm?wibcode=000008&lvl=2

Figure 4: Total Establishments in Top Industries 2010



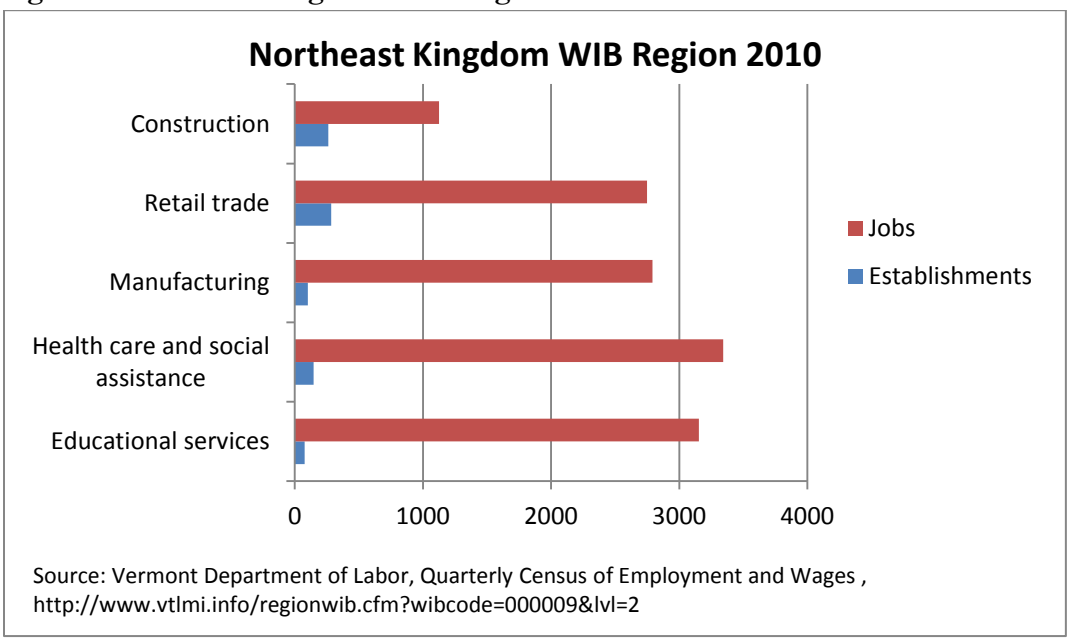
Source: Vermont Department of Labor, Quarterly Census of Employment and Wages, http://www.vtlmi.info/regionwib.cfm?wibcode=000008&lvl=2

Figure 5: Lake Champlain WIB Region 2010



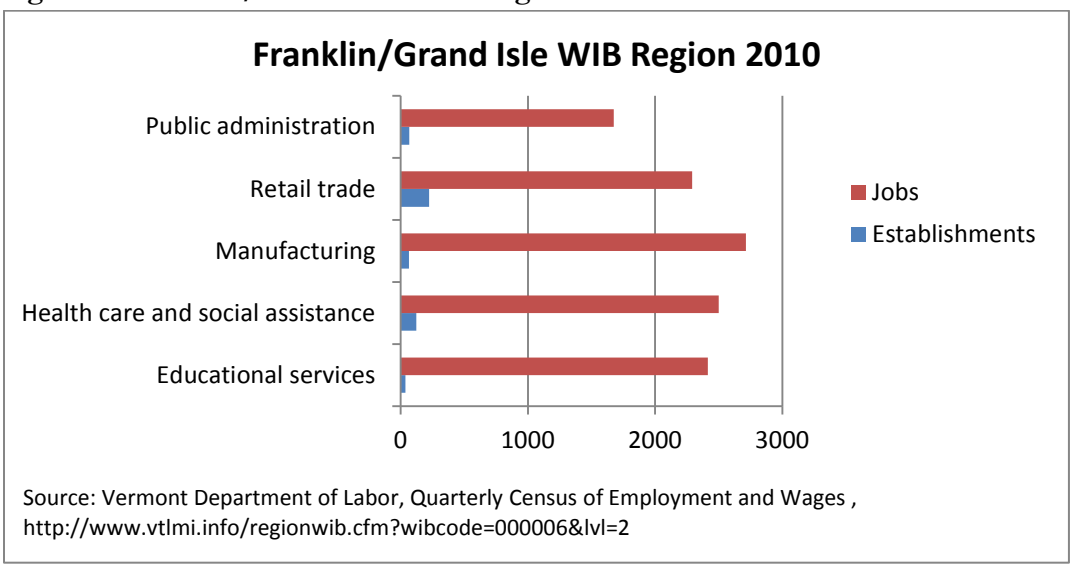
Source: Vermont Department of Labor, Quarterly Census of Employment and Wages , http://www.vtlmi.info/regionwib.cfm?wibcode=000007&lvl=2

Figure 6: Northeast Kingdom WIB Region 2010



Source: Vermont Department of Labor, Quarterly Census of Employment and Wages , http://www.vtlmi.info/regionwib.cfm?wibcode=000009&lvl=2

Figure 7: Franklin / Grand Isle WIB Region 2010



Source: Vermont Department of Labor, Quarterly Census of Employment and Wages , http://www.vtlmi.info/regionwib.cfm?wibcode=000006&lvl=2

Figure 8: Central Vermont WIB Region 2010

Source: Vermont Department of Labor, Quarterly Census of Employment and Wages, http://www.vtlmi.info/regionwib.cfm?wibcode=000004&lvl=2

Appendix B - Additional Case Studies

The following Case Studies highlight rural industrial park developments, one eco-industrial park that has found its sustainablity restricitions to cumbersome for many potential tenants, and a successful partnership between a town, and two regional economic development organizations.

Cape Charles, VA: Eco-industrial Park[43]

- Town residents bonded $4.6 million to build new Sustainable Technologies Industrial Park (STIP)
- In the first few years after opening, the STIP leveraged another $8 million from private companies locating there and created more than 65 new jobs. Unfortunately, some of the businesses have since closed, and the county has struggled to replace them. According to local officials, federal and state officials developed a rigorous list of sustainability criteria for how businesses in the park could operate. Apparently, these criteria are so stringent that the already small pool of potential green businesses able to locate in the park became even smaller.

North Etowah Industrial Park[44]

- The Town of Etowah partnered with McMinnn County Economic Development Authority and the regional development authority to develop the North Etowah Industrial Park. The Town purchased land and created infrastructure, bringing water, sewer and utilities to the park, that would attract industry – John Solsbee, the town manager, credits this proactive approach as being the key factor in the success of the park.
- Once the site preparations were complete, companies started calling. Etowah was never in the position of being able to offer cash incentives, but site development at the industrial park and the existing rail infrastructure, combined with the county's payment in lieu of taxes program, were sufficient, as Solsbee said, "to put some skin in the game." Solsbee's rapport with certain manufacturing executives helped, too. "Small towns can't pretend to be something that they're not," he said. "Relationships and honesty are crucial factors." Today, Etowah is home to major industrial players, including Waupaca Foundry, Johns Manville and Consolidated Metco. Average wages in Etowah's industrial park range from $16 to $20 per hour plus benefits.

[43] Lambe, W. (2008). *Small Towns Big Ideas: Case Studies in Small Town Community Economic Development Infrastructure.* North Carolina: UNC School of Government - N.C. Rural Economic Development Center. page 33.

[44] Lambe, page 58.

Appendix C - Rural Business / Industrial Park Examples

The following list identifies examples of rural business/industrial parks that are operating in the U.S. The websites for these parks provide information on marketing, incentives, ownership/partnership, pricing and infrastructure – these examples can be helpful in developing the concept, design and marketing materials for an industrial park in Johnson.

Bryant Park, NY
http://www.pps.org/articles/mgmtbryantpark/

Cannery Park, CA
http://cityofdavis.org/cannerypark/

Cape Charles, VA
http://www.smartcommunities.ncat.org/success/northam.shtml

Chillicothe Area Industrial Park, MO
http://www.chillicothecity.org/ind_develop.html

Eastman Business Park, NY
http://www.eastmanbusinesspark.com/index.php

Emmetsburg Business Park, IA
http://www.emmetsburg.com/EconDev/BusinessPark.htm

Genessee Valley Agri-Business Park, NY
http://www.gcedc.com/index.php/sites/genesee-valley-agri-business-park/

Lindale Industrial Park, TX
http://www.lindaletexas.com/lindale-industrial-park

Mint Farm Industrial Park, WA
http://www.mintfarm.com/home/index.php

Mondovi Industrial Park Financing, WI
http://www.mondovi.com/business-development.html

Quonset Business Park, RI
http://quonset.com/

Town of Sheboygan Business Park, WI
http://sheboygancountyedc.com/assets/Business-Park-PDFs/BPTownofSheboygan2011v2.pdf

Appendix D - Key Marketing Team Members

When it is time to begin marketing the industrial park concept, it is important to put together a marketing team that includes a variety of community members and professionals. The following is an example of one list of key marketing team imembers[45]:

Community Services Representatives: These are the persons who deliver the utility services so valuable to a business. These individuals need to address technical questions about particular utility services important to the prospect.

Building Standard Representative: This individual needs to address the technical issue surrounding the obtaining of permits and the standards required to meet local and state building standards.

Training and Educational Specialists: These individuals need to be prepared to answer questions regarding educational achievements, future educational programming and training incentives available to the firm.

Labor Specialist: This individual will be asked questions about availability of labor, assistance in finding and screening qualified persons, and labor-training programs.

Elected Officials: These individuals will be necessary to demonstrate the interest within the community in bringing the firm into the community. They will also be asked to facilitate any necessary governmental action that will need to be initiated, such as local incentive programs. They may also be asked questions about the local tax structure.

Financing Expert: This position may require a person from the public sector to discuss any financing programs available to the firm. In addition, a private-sector financial expert may be requested to give a summary of the local economy.

Community Life Expert: Every firm is concerned about the opportunities for social and cultural exchange for the families of employees moving into the area, as well as the contentment of families of future local employees. Included in this role may be questions regarding health services.

Engineering Expert: The firm will have a number of questions about transportation networks, on- and off-site construction issues, drainage systems and other appropriate development standards. This may be the city/county engineer or a private engineer (for example, the engineer that completed the engineering study).

[45] Grunkemeyer, e. a. (n.d.). *Community Preparedness for Site Development.* Retrieved January 2012, from The Web Book of Regional Science: Regional Research Institute, West Virginia University: http://rri.wvu.edu/WebBook/Thomas/development1.html

Appendix E - Information required for site seekers

The following list provides an overview of the type of information potential businesses might be looking for when they consider locating at the new industrial park. It is a good idea to be able to answer these questions before you begin marketing the site. (List adapted from Deloitte and Touche Fantus [46])

General

Is there a brokerage listing with clear presentation of appropriate contact(s)?
What is the sale price (for buildings; lease rate and operating expenses may be applicable)?

Business Climate

What are the available / applicable incentives?
Is there a responsive economic development team?
Is the site in a tax advantaged / enterprise zone?

Expansion / Growth Potential

Is there adequate parking with room for expansion?
What is the expansion potential?
Are you targeting new companies or expansion by existing companies in the area?
What is the other new or projected construction in the area?

History

What are the current and former uses of the site?
Has there been an environmental audit (Independent phase I)?
What are the natural disasters risks(e.g., earthquakes)?
Are there endangered species or wildlife preserves?
Is there evidence of excessive or problematic soil conditions (e.g., erosion)?
What is the ownership status / history?
Are there property inspection reports?
What is the ownership status and land use of surrounding properties?

Labor Climate

Is the property aesthetically attractive?
What is the labor management relations environment?
What is the labor shed (i.e., skilled, educated workforce) for the site?
Who are the major employers in the area?

Physical Characteristics

Provide adjacent property descriptions.
What is the configuration (typically rectangular or square preferred) of the site?
Is it a dust/particulate/odor free area?
What is the availability of labor for site preparation and construction (time)?
Are there geology / soils report (soil bearing capacity) with minimal foundation engineering?
Are there natural or man-made water bodies?
Are there rock outcroppings or other significant development constraints?
Are there wetlands or floodplains?
What is the on-site vegetation?
Provide photographs (aerial and site).

---

[46] Deloitte & Touche Fantus. (2001, October). *Industrial/Business Park Standards: Rural Regions.* Retrieved January 2012, from http://www.neded.org/files/businessdevelopment/library/ruralregion.pdf

Provide site elevation.
Provide site plan and land survey.
Provide size of property (acreage)?
What are the site specifications?
Provide topographic maps; plats; drawings.
Is there a watershed or wetland survey?
Is the topography workable?

Quality of Life

Is the site an ample distance from residential areas and schools?
Is it in a crime safe area / is there appropriate security for the location (gate, guard, fence)?
Is there on-site or nearby child care?
What is the proximity to business amenities (hotels, restaurants, overnight carriers, staffing agencies)?

Regulations (Assessment / Permitting / Taxation / Zoning)

What is the allowable coverage ratio and what are the minimum setbacks?
Is the zoning appropriate for the project (typical industrial or manufacturing required)?
Provide assessor's parcel number.
Provide covenants, design guidelines, and restrictions affecting development.
Provide easements (widths, locations, rights-of-way).
Are there green or open space requirements or tree removal regulations?
Are there municipal jurisdictions (within or outside city limits)?
Is there permitting in-place for the site?
Is there a reasonable building permit process and expected timeframe?
Is there a reasonable permitting approval process?
What is the solid waste disposal infrastructure?
Is the site within any special regulatory zones (e.g., air quality, wildlife preserve, endangered species, etc.)?
What are the subdivision regulations?
Provide zoning description and map (zoning variance process and timeframe if necessary).

Transportation

Provide map of highway / transportation network.
Is the site outside of the flight path of a commercial airport or military airfield?
What is the proximity to mass transit nodes (bus lines, train stops, or interstate exits)?
Is there rail accessibility?
Is the site readily accessible for cars and trucks (appropriate turn lanes, traffic signals, etc.)?
Is there readily available and proximate fire protection and emergency services?
Is there reasonable existing vehicular traffic flow?

Utilities

Is the site in an appropriate location for intended use (fits into the context of immediate area)?
Are digital switching and fiber optic available?
Is dual feed power service available?
What are the existing utilities (are the location and size, consistent with infrastructure (if not in-place, cost and distance to extend existing lines))?
Is there access to municipal electric, natural gas, water, and sewer?
What are the utility rates?
What is the reliability of electric and gas service?

Appendix F - Examples of applicable infrastructure in existing industrial parks

Humboldt Industrial Park

Water

CAN DO Inc. supplies quality water throughout the park in 12- and 16-inch ductile iron mains at pressures and flow rates suitable for heavy industrial use.

Fire protection is aided by four 1-million gallon standpipes, which ride on the system.

Companies with significant water usage requirements may also connect directly to the City Authority which has a larger water system with ample capacity.

Sewer

Sanitary sewage service is provided by CAN DO Inc. Twelve-inch gravity collection lines, as well as ten-inch laterals, allow industries easy access to the system. CAN DO Inc owns and operates the wastewater treatment plant within the Park, which is presently sized for 1,000,000 gallons per day.

Electrical

Reliable electrical service is provided by PPL Utilities, a national leader in power generation and distribution. PPL can serve customers at the 12kV or 69kV voltage levels. There are currently three 12kV substations in the area.

Telecommunications

Verizon and Frontier Communications provide a state-of-the-art telecommunications system with 100-percent digital switching and superior communications services, highlighted by an extensive fiber optic network This system provides a state-of-the-art telecommunications platform for voice, data and video transmissions. The network supports SONET technology for ultra-reliable service to customers with critical requirements.

Genessee Valley Agri-Business Park

Water

12" Municipal water line, 58 psi, $4.04/1,000 gallons

Sewer

12" Municipal sewer, $5.03/1,000 gallons; 2 million gallons/day capacity

Wastewater

On-site wastewater treatment plan, expandable capacity

Electrical

115kv, 34.5kv, 13.2kv w/ 10+ Mega Watts Available via National Grid

Natural Gas

4" Medium Pressure Lines, Serviced by National Fuel

Emmetsburg Business Park

Water

8" municipal water main, can be installed up to 6 inches

Sewer

8" Municipal sewer main, 4" sewer line; 1.5 million gallons/day capacity

Wastewater

On-site wastewater treatment plan, expandable capacity

Electrical

13 kv, three phase looped electrical service via MidAmerican Energy

Natural Gas

4" Municipal main with 17# or 250# psi

Appendix G - Successful Public-Private Partnerships

Adapted from *Ten Principles for Successful Public/Private Partnerships*[47]

Today, public/private partnerships are considered "creative alliances" formed between a government entity and private developers to achieve a common purpose. Although each public/private partnership project is unique in its local implementation, most share common stages within a development process bounded by legal and political parameters. In the first phase—conceptualization and initiation—stakeholders' opinions of the vision are surveyed and partners are selected through a competitive bid process. In the second phase, entities document the partnership and begin to define project elements, roles and responsibilities, risks and rewards, and the decision and implementation process. Partners also negotiate the "deal" and reach agreement on all relevant terms. In the third phase, the partnership attempts to obtain support from all stakeholders, including civic groups, local government (through entitlements), and project team members. Project financing begins and tenant commitments are secured. Finally, in the fourth phase, the partnership begins construction, leasing and occupancy, and property and asset management. However, the process is repetitious and can continue beyond the final phase when partners manage properties or initiate new projects. The ten principles for a successful public-private partnerships are:

1. Prepare Properly for Public/Private Partnerships
2. Create a Shared Vision
3. Understand Your Partners and Key Players
4. Be Clear on the Risks and Rewards for All Parties
5. Establish a Clear and Rational Decision-Making Process
6. Make Sure All Parties Do Their Homework
7. Secure Consistent and Coordinated Leadership
8. Communicate Early and Often
9. Negotiate a Fair Deal Structure
10. Build Trust as a Core Value

[47] Corrigan, M. B. (2005). *Ten Principles for Successful Public/Private Partnerships*. Washington DC: ULI - the Urban Land Institute. http://www.uli.org/ResearchAndPublications/Reports/~/media/Documents/ResearchAndPublications/Reports/Ten Principles/TP_Partnerships.ashx

Appendix H - Sample Covenants, Conditions and Restrictions (CC&Rs)

The following table lists the purposes and section titles of CC&Rs from three sample communities, all of which were written for properties in which the Town, Village or City owned the industrial park and sold lots to businesses.

Table 3: Industrial Park Covenants, Conditions and Restrictions from Sample Communities

Village of Amherst Industrial Park – Restrictive Covenants	**Skypark Industrial Park – Covenants**	**Hortonville Business and Industrial Park – Covenants and Guidelines**
The declared purpose of these restrictions is to insure proper use and development of each parcel in the industrial parks; to protect the environment; to guard against the erection of improper, unsuitable structures and uses; to maintain property values; to insure protection from incompatibility and unsightliness; to protect the health and safety of residents in the area.	The purpose of these covenants is to provide for development of manufacturing, research, and related compatible uses in an attractive and functional setting. The assurance of protection from incompatible, unsightly, or nuisance uses will serve to maintain property values and to attract quality, labor intensive, light manufacturing and research and development firms to Sky Park.	It is the goal of the Village of Hortonville, Wisconsin, to establish a harmonious development of the Hortonville Business and Industrial Park Phase II which will promote industrial development within the Village of Hortonville for the benefit of its residents; the Village of Hortonville intends for the Hortonville Business and Industrial Park Phase II to be improved with buildings and industries which will promote and enhance the economy of the Village of Hortonville and Outagamie County.
Title and Easements (including Infrastructure and Utility easements)	Site Plan Review and Approval	Building Setbacks
Permitted Uses	Permitted Uses	Minimum Construction Costs
Conditional Uses	Conditional Uses	Building Materials
Prohibited Uses	Prohibited Uses	Building Roofs
Lot Sizes	Interpretation of Provisions	Building Elevations
Setbacks	Lot Coverage, Yard Setbacks	Building Location
Required Investment Criteria	Landscaping and Open Space	HVAC Units and Miscellaneous Equipment
Site Plan Review	Maintenance	Parking
Architectural and Design Controls	Building Construction, Site Alteration, Outside Activities	Landscaping
Landscaping	Buildings	Signs
Parking	Non-Building Site Elements	Temporary Buildings
Outdoor Storage	Parking	Fencing
Signage	Fences	Storage and Loading Areas
Noise	Signs	Nuisances; Pollution
Waste	Utilities	Prohibited Uses
Maintenance	Drainage Systems	Property Maintenance
Enforcement	Private Wells	Drainage Control
Re-Purchase Rights	Industrial Waste	Lighting

Severability	Resale of Vacant Land/Options	Regulation of Improvements (Plan Approval / Permitting)
http://www.amherstwi.govoffice2.com/index.asp?Type=B_BASIC&SEC={1B983420-E344-4685-99F9-B0E3753D5E10}	http://www.eauclairedevelopment.com/docs/SkyParkCovenant.pdf	Recapture of Land - Village Right of First Refusal as to Vacant Land
		Recapture of Land for Failure to Improve
		Enforcement of Covenants and Restrictions
		http://www.hortonvillewi.org/industrial-park/covenants

Appendix I - Industry Data by County

The US Economic Development Agency has funded research in regional clusters including the role clusters can play in rural regions. See: Unlocking Rural Competitiveness: The Role of Regional Clusters http://www.ibrc.indiana.edu/innovation/reports.html

One component of this research includes the development of a database and mapping tool that allows you to identify industries by counties (and regional clusters). The data for Lamoille County can be seen below. Data for additional counties and the mapping tool can be found at: http://www.ibrc.indiana.edu/innovation/interactive.asp?dpage=60

Table 4: Lamoille County Industry Data

Industry Type	Establishments	Employees	Wages
Total All Industries	1,072	10,663	$341,758,356
Advanced Materials	9	81	$3,664,905
Agribusiness, Food Processing & Technology	25	185	$5,699,345
Apparel & Textiles	20	99	$4,103,395
Arts, Entertainment, Recreation & Visitor Industries	83	2,415	$58,331,681
Biomedical/Biotechnical (Life Sciences)	18	737	$31,994,104
Business & Financial Services	133	458	$27,605,190
Chemicals & Chemical Based Products	8	51	$2,844,905
Defense & Security	26	252	$15,306,006
Education & Knowledge Creation	18	301	$13,217,835
Energy (Fossil & Renewable)	54	498	$22,604,169
Forest & Wood Products	14	82	$3,025,950
Glass & Ceramics	3	3	$118,080
Information Technology & Telecommunications	23	113	$8,459,319
Transportation & Logistics	22	112	$4,004,870
Manufacturing Supercluster	7	79	$3,185,223
Fabricated Metal Product Mfg	3	20	$736,775
Machinery Mfg	2	48	$1,899,586
Computer & Electronic Product Mfg	1	1	$53,394
Electrical Equipment, Appliance & Component Mfg	1	10	$495,469

Appendix J - Additional literature

The following resources, not cited in the report, provide information on rural business incubators, region clusters, eco-industrial parks.

Fieldbook for the Development of Eco-Industrial Parks
http://www.eidnetwork.com/documents/RTI%20Fieldbook.pdf

Handbook on Codes, Covenants, Conditions, and Restrictions for Eco-Industrial Parks
http://www.eidnetwork.com/documents/Cornell%20CCR%20Handbook.pdf

Feasibility Analysis of a Rural Eco-Industrial Park in Perry County Illinois
http://www.usc.edu/schools/price/ced/pdf/Rural%20Eco-Industrial%20Park.pdf

Resource Manual on Infrastructure for Eco-Industrial Development
http://www.usc.edu/schools/price/research/NCEID/Infrastructure.pdf

Identifying Obstacles to the Success of Rural Incubators
http://www.rural.org/publications/NBIA01-08.pdf

Unlocking Rural Competitiveness: The Role of Regional Clusters
www.eda.gov/PDF/2007 Unlocking Rural Comp Report.pdf

Bibliography

Area Development Site and Facility Planning. (2010). *25th Annual Corporate Survey*. Retrieved February 2012, from Area Development Site and Facility Planning Online: http://www.areadevelopment.com/AnnualReports/jan2011/corporate-consultants-survey-site-selection2011-39290.shtml#

Black, Jim. Professor of Business at Johnson State College. (2012). Personal communication. February 10, 2012.

Clary, J. (2011, May 18). *Construction of infrastructure in Lindale Industrial Park has begun*. Retrieved February 2012, from the right corner of texas: http://therightcorner.com/news/construction-infrastructure-lindale-industrial-park-has-begun

Corrigan, M. B. (2005). *Ten Principles for Successful Public/Private Partnerships*. Washington DC: ULI - the Urban Land Institute. http://www.uli.org/ResearchAndPublications/Reports/~/media/Documents/ResearchAndPublications/Reports/TenPrinciples/TP_Partnerships.ashx

Deloitte & Touche Fantus. (2001, October). *Industrial/Business Park Standards: Rural Regions*. Retrieved January 2012, from http://www.neded.org/files/businessdevelopment/library/ruralregion.pdf

Draft #1 Chittenden County, VT Target Cluster & Industry Analysis. (2011, October 19). An ECOS Analysis Report. http://ecosproject.com/sites/default/files/documents/ECOS%20Draft%20%231%20Target%20Sector%20Analysis%2010-18-11.pdf

Economic and Policy Resources, Inc. (2011). NVDA – Strategic Industries in the Northeast Kingdom. June 2011.

Frej, A. e. (2001). *Business Park and Industrial Development Handbook*. Washington, D.C.: ULI - the Urban Land Institute.

Grants - Award Summary. (n.d.). Retrieved February 2012, from Recovery.Gov Track the Money: http://www.recovery.gov/Transparency/RecipientReportedData/pages/RecipientProjectSummary508.aspx?AwardIdSur=3592

Goetz, Stephan, Martin Shields, and Qiuyan Wang. (2004, November). "Agricultural and Food Industry Clusters in the Northeast U.S.: Technical Report," Regional Rural Development Paper No. 26, Penn State University, Northeast Regional Center for Rural Development, November 2004.

Grunkemeyer, e. a. (n.d.). *Community Preparedness for Site Development*. Retrieved January 2012, from The Web Book of Regional Science: Regional Research Institute, West Virginia University: http://rri.wvu.edu/WebBook/Thomas/development1.html

Hallquist, David. CEO of Vermont Electric Cooperative (2012). Personal communication. February 7, 2012.

Horseman, Ken. Vermont Department of Economic, Housing and Community Development. (2012). Personal communication. February 10, 2012.

Infrastructure Overview. (n.d.). Retrieved February 2012, from Emmetsburg Business Park: http://www.emmetsburgbusinesspark.com/overview.php#infrastructure

Lambe, W. (2008). *Small Towns Big Ideas: Case Studies in Small Town Community Economic Development Infrastructure*. North Carolina: UNC School of Government - N.C. Rural Economic Development Center.

Mandeville, John. Executive Director of the Lamoille Economic Development Corporation. (2012). Email communication. February 22, 2012.

Monitor Group. (2007, February). A Competitive Benchmarking of the Vermont Economy. Washington, DC: National Governors' Association Center for Best Practices, February 2007.

Mullin, S. (2002). *Public-Private Partnerships and State and Local Economic Development: Leveraging Private Investment*. U.S. Economic Development Administration.

Porter, Michael E., et al. (2001). *Clusters of Innovation: Regional Foundations of U.S. Competitiveness*. Council on Competitiveness.
http://www.compete.org/images/uploads/File/PDF%20Files/CoC_Reg_Found_national_cluster.pdf

Porter, Michael E. (2011). Vermont Competitiveness: State and Cluster Economic Performance. Prepared for Governor Peter Shumlin. National Governors Association Winter Meeting. February 26, 2011.

Rosenfeld, Stuart. (2010). Growing Jobs, Vermont-Style: Skills and Knowledge for Vermont's "Sustainable Food System Cluster" and Natural Resources. Regional Technologies Strategies.
http://rtsinc.org/publications/documents/VTReport_000.pdf

Shea, J. R. (2008, November 24). The Role of Municipalities in Public Private Partnerships. *Banker & Tradesman: The Real Estate, Banking and Commercial Weekly for Massachusetts* .

Sitton, R. (1993, May). *I-440 Industrial Park Grant Approved*. Retrieved February 2012, from http://www.uamont.edu/facultyweb/sitton/pf/i440.html

Stainback, J. (2000). *Public/Private Finance and Development*. New York: John Wiley & Sons.

Unlocking Rural Competitiveness: The Role of Regional Clusters. (2007, January).
http://www.ibrc.indiana.edu/innovation/reports.html

Vermont Department of Labor. Lamoille County WIB. Retrieved February 2012, from http://www.vtlmi.info/regionwib.cfm?wibcode=000008&lvl=2

Vermont Environmental Consortium and Yellow Wood Associates. (2009). Vermont's Environmental Sector: Identifying Green Workforce Training Needs and Opportunities.
http://vecgreen.com/pdf/VEC_Report_on_VTs_Environmental_Sector.pdf

YELLOW WOOD
associates, inc.

228 North Main Street
St. Albans, VT 05478
www.yellowwood.org

p: 802.524.6141
f: 802.524.6643
yellowwood@yellowwood.org