Economic and Market Analysis Johnson, Vermont

Submitted to:

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5 Centennial Drive, Peabody, Massachusetts

In fulfilment of sub-contract obligations for services related to

Town of Johnson Area Wide Planning

Submitted by:

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1 DEMOGRAPHIC AND ECONOMIC ANALYSIS

1.1 Population

Johnson is slowly losing its population ranking compared to its neighbors. In 2000, it was the third most populous town; today it is ranked fourth most populated municipality in Lamoille County. The US Census Bureau counted 3,446 people living in Johnson in 2010. This includes the population of Johnson Village which at that time was 1,443. Since the last population count in 2000, the number of people living in the Village decreased by 24. Overall, the Town of Johnson's population grew by 5.3% (172 people) from 2000 to 2010, which is the exactly the County average. From 2010 to today, the Town has experienced a slowdown in its growth rate, rising at only 1.9% which is 17% slower than the average county growth rate of 2.3%. The County's largest towns, Morrisville, Stowe, Cambridge and Hyde Park, are all now outpacing Johnson's growth rate. Johnson was once the fastest growing town among the five most populated municipalities; it is now the slowest.

Table 1.1: Population Change in Lamoille County, by Town

	Total Population			Population Change		
	2000	2010	2015	2000-15	2000-10	2010-15
Lamoille County	23,233	24,475	25,027	7.7%	5.3%	2.3%
Belvidere	294	348	342	16.3%	18.4%	-1.7%
Cambridge	3,186	3,659	3,737	17.3%	14.8%	2.1%
Eden	1,152	1,323	1,392	20.8%	14.8%	5.2%
Elmore	849	855	956	12.6%	0.7%	11.8%
Hyde Park	2,847	2,954	3,043	6.9%	3.8%	3.0%
Johnson	3,274	3,446	3,512	7.3%	5.3%	1.9%
Morristown	5,139	5,227	5,360	4.3%	1.7%	2.5%
Stowe	4,339	4,314	4,407	1.6%	-0.6%	2.2%
Waterville	697	673	681	-2.3%	-3.4%	1.2%
Wolcott	1,456	1,676	1,597	9.7%	15.1%	-4.7%

Source: Census 2000+2010 (DP-1), Census ACS 2015 (S0101)

Vermont's rate of growth in the last decade ranked 44th in the nation. Population growth increased only by 2.8% in the last decade, compared to 8.2% between 1990 and 2000.

1.2 Population Change and Forecast

1.2.1 Population by Age

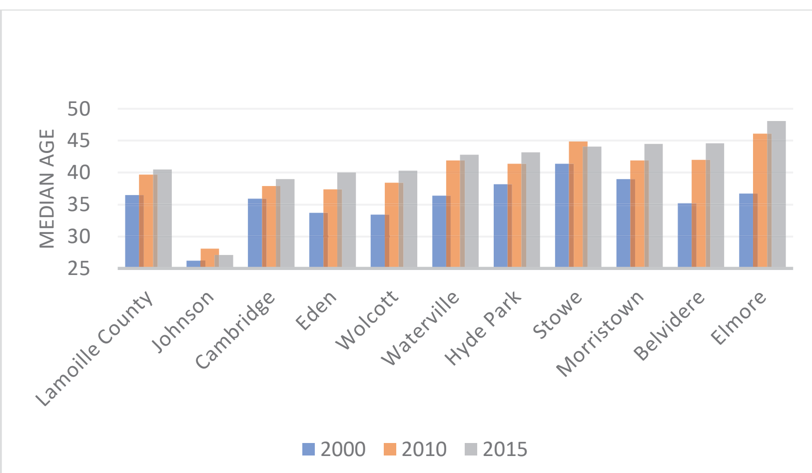
Due to Johnson State College, the Town has an unusually low median age. Johnson's median age consistently stays in the late-20's and is currently 27 years. Johnson has twice the number of people between 20 and 24 years of age than the County average. It also has 40% less people over 60 than the county average. In the other age categories, the Town is close to county average.

Table 1.2: Age of Population in Lamoille County, by Town

	Total Population			Median Age		
	2000	2010	2015	2000	2010	2015
Lamoille County	23,233	24,475	25,027	37	40	41
Belvidere	294	348	342	35	42	45
Cambridge	3,186	3,659	3,737	36	38	39
Eden	1,152	1,323	1,392	34	37	40
Elmore	849	855	956	37	46	48
Hyde Park	2,847	2,954	3,043	38	41	43
Johnson	3,274	3,446	3,512	26	28	27
Morristown	5,139	5,227	5,360	39	42	45
Stowe	4,339	4,314	4,407	41	45	44
Waterville	697	673	681	36	42	43
Wolcott	1,456	1,676	1,597	33	38	40

Source: Census 2000+2010 (DP-1), Census ACS 2015 (S0101)

Figure 1.1: Median Age in Towns of Lamoille County



Source: Census 2000, 2010. ACS 2015

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Table 1.3:

	Age 0-19			Age 20-24			Age 25-34			Age 35-60			Age 60+		
	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015
Lamoille County	27%	26%	25%	7%	6%	7%	13%	12%	12%	37%	37%	36%	16%	19%	21%
Belvidere	29%	24%	23%	7%	4%	6%	14%	10%	7%	34%	45%	45%	17%	17%	19%
Cambridge	26%	26%	25%	6%	5%	7%	16%	15%	15%	39%	40%	37%	13%	15%	17%
Eden	33%	29%	30%	6%	5%	3%	14%	12%	12%	37%	39%	37%	11%	14%	19%
Elmore	32%	24%	21%	3%	3%	5%	12%	9%	7%	41%	45%	42%	11%	19%	25%
Hyde Park	27%	25%	24%	5%	4%	6%	14%	11%	11%	37%	36%	33%	17%	23%	27%
Johnson	31%	28%	32%	17%	18%	15%	13%	12%	12%	28%	28%	28%	12%	13%	13%
Morristown	27%	25%	23%	5%	5%	3%	12%	11%	12%	37%	36%	39%	19%	23%	24%
Stowe	23%	23%	21%	5%	4%	7%	12%	11%	14%	42%	38%	35%	19%	25%	24%
Waterville	30%	25%	24%	6%	4%	6%	12%	11%	10%	39%	41%	40%	14%	19%	21%
Wolcott	31%	29%	28%	5%	4%	4%	17%	11%	10%	36%	39%	41%	11%	17%	19%

Source: Census 2000+2010 (DP-1), Census ACS 2015 (S0101)

Johnson's population has some of the lowest levels of educational attainment in the county. Educational achievements are measured in those people over 25 years of age. In Johnson, almost half of the population have no more than a high school diploma, second to only Eden with the highest percentage, and in contrast to the county average which is 37%. Ironically, even though Johnson Town is home to Johnson State College, and has by far, the highest percentage of people between 20 and 24 years of age in the county, at 15%. With Eden, it has the lowest percentage of residents, 25 years or older who have Bachelor's degrees, at 22%, as compared with the county average of 36%. The majority of young people leave Johnson after graduating.

Table 1.4: Education of Population Age 25+, in Lamoille County, by Town

	Population, Age 25+			High School or lower			Lower than Bachelor			Bachelor or higher		
	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015
Lamoille County	15,281	16,306	17,205	44%	39%	37%	25%	27%	27%	31%	35%	36%
Belvidere	192	275	244	62%	46%	40%	22%	35%	34%	16%	19%	26%
Cambridge	2,170	2,346	2,557	41%	38%	30%	28%	23%	32%	31%	40%	38%
Eden	714	798	940	72%	57%	56%	16%	23%	22%	12%	20%	22%
Elmore	540	604	706	40%	32%	26%	22%	29%	25%	38%	39%	49%
Hyde Park	1,928	2,040	2,143	52%	48%	46%	21%	27%	26%	26%	25%	28%
Johnson	1,708	1,774	1,836	51%	54%	49%	22%	24%	29%	27%	23%	22%
Morristown	3,503	3,755	3,992	49%	35%	41%	27%	24%	26%	24%	41%	33%
Stowe	3,129	2,994	3,209	18%	15%	16%	28%	34%	24%	54%	50%	60%
Waterville	443	529	480	58%	55%	44%	19%	21%	28%	23%	25%	28%
Wolcott	954	1,191	1,098	54%	56%	45%	28%	27%	32%	18%	17%	23%

Sources: Census 2000 (P037), Census ACS 2010 + 2015 (S1501)

Johnson has the highest percentage of households with school aged children. It also has the highest percentage of single parent households, with nearly 40% more than the county average.

Table 1.5: Families with school age children - 2000, 2010, 2015

	Total households			% of households with children, 18 or younger		
	2000	2010	2015	2000	2010	2015
Lamoille County	5,986	6,274	6,092	51%	48%	46%
Belvidere	68	91	98	62%	47%	41%
Cambridge	886	975	988	49%	50%	40%
Eden	321	354	369	58%	51%	53%
Elmore	220	234	297	58%	45%	41%
Hyde Park	773	806	727	49%	45%	44%
Johnson	673	685	679	55%	51%	54%
Morristown	1,317	1,365	1,391	51%	48%	41%
Stowe	1,128	1,118	907	45%	44%	52%
Waterville	190	195	219	52%	45%	40%
Wolcott	410	451	417	56%	53%	51%

Sources: Census 2000 (P017), 2010 (P39), Census ACS 2015 (B11004)

Table 1.6: Single-parent households - 2000, 2010, 2015

	Male householder, no wife present			With related children under 18			Female householder, no husband present			With related children under 18			Total number of single parent households			% of single parent households as a % of total family households		
	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015
Lamoille Co	395	497	309	282	340	309	790	944	769	577	694	628	1185	1441	1078	20%	23%	18%
Belvidere	6	9	4	6	4	4	5	10	13	5	8	9	11	19	17	16%	21%	17%
Cambridge	37	64	57	33	48	57	87	145	111	60	118	102	124	209	168	14%	21%	17%
Eden	45	42	32	34	32	32	43	48	33	29	36	22	88	90	65	27%	25%	18%
Elmore	13	10	22	11	5	22	22	20	25	13	16	20	35	30	47	16%	13%	16%
Hyde Park	79	69	43	49	52	43	96	117	67	66	78	64	175	186	110	23%	23%	15%
Johnson	30	81	11	30	54	11	142	135	201	95	107	146	172	216	212	26%	32%	31%
Morristown	84	111	58	62	71	58	224	254	189	160	175	162	308	365	247	23%	27%	18%
Stowe	51	54	38	25	28	38	106	129	53	90	93	44	157	183	91	14%	16%	10%
Waterville	19	11	8	16	9	8	16	23	39	13	17	37	35	34	47	18%	17%	21%
Wolcott	31	46	36	16	37	36	49	63	38	46	46	22	80	109	74	20%	24%	18%

Sources: Census 2000 (P017), Census 2010 (DP1), ACS 2015 (B11004)

Nearly 40% of all households in Johnson live in rental units; half of them are families while the other half are non-family households. Forty-four percent of all renters are younger than 45 years of age. Johnson also has some of the most crowded housing in the county with only Eden having more residents per household. In Johnson, the average number of occupants per household is 2.65 versus the county average of 2.39. Rental housing in Johnson is less crowded that owner-occupied units with renters averaging 2.4 people per unit, versus 2.8 people for units occupied by their owners.

Table 1.7: Johnson's household characteristics

	2000	2010	2015
Total owner occupied households	727	749	644
Total renter occupied households	443	461	489
Family owner households	523	533	472
Family renter households	146	152	207
Owner householder age 65+, living alone	62	71	76
Rental householder age 65+, living alone	38	29	48

Sources: Census 2000 (H017), Census 2010 (H18), ACS 2015 (B25011)

Table 1.8: Johnson households by tenure and age

	Owner occupied			Owner as % of county households			Renter Occupied			Renter as % of county households		
	2000	2010	2015	2000	2010	2015	2000	2010	2015	2000	2010	2015
All Ages	727	741	644	62%	57%	57%	443	557	489	38%	43%	43%
Age 15-24	26	20	0	2%	2%	0%	151	204	108	13%	16%	10%
Age 25-34	100	72	46	9%	6%	4%	111	82	140	9%	6%	12%
Age 35-44	162	186	146	14%	14%	13%	71	79	68	6%	6%	6%
Age 45-54	168	199	165	14%	15%	15%	46	46	59	4%	4%	5%
Age 55-64	119	116	123	10%	9%	11%	18	51	41	2%	4%	4%
Age 65-74	73	69	106	6%	5%	9%	18	55	53	2%	4%	5%
Age 75-84	54	51	29	5%	4%	3%	21	24	4	2%	2%	0%
Age 85+	25	28	29	2%	2%	3%	7	16	16	1%	1%	1%

Sources: Census 2000, ACS 2010+2015 (B25007)

Table 1.9: Average number of occupants per household – 2000, 2010, 2015

	2000	2010	2015
Lamoille	2.45	2.37	2.39
Belvidere	2.58	2.27	2.41
Cambridge	2.51	2.42	2.41
Eden	2.82	2.64	2.73
Elmore	2.77	2.34	2.51
Hyde Park	2.49	2.43	2.35
Johnson	2.43	2.37	2.65
Morristown	2.39	2.33	2.28
Stowe	2.27	2.21	2.21
Waterville	2.62	2.46	2.51
Wolcott	2.63	2.61	2.61

Sources: Census 2000, Census 2010 (DP-1), ACS 2015 (B25010)

Table 1.10: Household Income

Location	Median Adjusted Income
2015	
Vermont	$36,931
Belvidere	$29,501
Cambridge	$39,508
Eden	$32,027
Elmore	$52,189
Hyde Park	$34,092
Johnson	$27,270
Morristown	$33,108
Stowe	$40,253
Waterville	$35,494
Wolcott	$31,337

Source: State of VT Department of Taxes

2 EXISTING CONDITIONS ANALYSIS

2.1 CURRENT CONDITIONS ANALYSIS

2.1.1 Land Uses

The area of interest (AOI) under consideration covers approximately 55 acres (±0.09 square miles). The bulk of the AOI, approximately 38 acres, is in the Village of Johnson. The remainder of the AOI is in the Town of Johnson. A map showing the area of interest, parcel lines and town/Village border is included as Figure 2.1. The AOI is roughly oriented northeast to southwest along the Railroad Street corridor, from Route 100 to the Old Mill Park recreation fields and former Cyprus Minerals Talc Mill. A portion of the AOI also extends south along River Road East.

The Village and Town do not have planning or zoning regulations controlling land use. A unified Town and Village Municipal Development Plan (MDP), 2016 - 2024 was approved by the Trustees and Selectboard in August 2016. The MDP delineates land use districts, their current and envisioned future uses as well as development patterns. The AOI overlaps several different planning districts in both the Town and Village as shown on Figure 2.2. A summary of the districts and approximate areas of the AOI is included in the table 2.1 below:

Table 2.1:

Land Use District	Approximate Area within AOI (acres)
Village - Main Street Storefront	2
Village - Lower Village	22
Village - Upper Village	3
Village - Industrial	9
Town - Agricultural	15
Town - Village 2	1
Town - Rural Residential/ Agricultural	3

The Main Street storefront district is intended to maintain the historic character of Main Street and to support commercial enterprises on the ground floor, with mixed use and residential uses above. This use area is also part of the Designated Village Center. Buildings should fit the scale and form of other historic buildings in the area.

The Lower Village district is to serve medium residential and commercial uses. The Railroad Street neighborhood is specifically referenced as being encouraged to have new commercial, cultural and service developments keyed to the adjoining Lamoille Valley Rail Trail.

The Upper Village, Village 2 and Rural Residential/Agriculture districts are to support medium density residential use with potential for Planned Use Developments (PUDs). Larger lot sizes and greater buffers are encouraged. Currently, some agricultural and commercial uses are present in these districts and are acceptable if lot sizes and buffers are appropriate.

The entire industrial district is encompassed within the AOI. This area is encouraged to maintain the current level of activity which has supported lumber mills and railroad uses. However, additional industrial density may be limited by the presence of flood plains and river corridors. The plan suggests caution in approving additional industrial uses as they may conflict with the neighboring residential uses.

The agricultural district within the AOI is largely adjacent to the Lamoille River and prone to flooding. The purpose of the district is to protect economically viable agricultural lands as well as to protect flood-prone and ecologically important lands from development.

2.1.1.1 Historic Resources

The Vermont State Register of Historic Places recognizes the Johnson Village Historic District (HD). The HD encompasses the portion of the AOI along Railroad Street from Main Street to the Lamoille River. Many of the homes along Railroad Street are specifically referenced in the HD and are Registered State Historic Resources. A map showing these important building locations is included as Figure 2.2. Construction styles of these buildings range from the late 1800s. The residential structures are vernacular Italianate and Queen Anne style wood frame and clapboard structures. Two exceptions are the public library, a brick Georgian Revival style building, built in 1917 and the Waterman House, a brick, double pile two-story home next the Lamoille River.

The bridge across the Lamoille River on Railroad Street is on the National Register of Historic Places. Bridge 6 is a unique Pratt Through Truss steel construction. The bridge was originally constructed after the 1927 flood with steel manufactured by Bethlehem Steel, and was rehabilitated in 2008.

2.1.1.2 Natural Resources

The AOI is essentially bisected by the Lamoille River, an important recreational resource for Johnson that supports canoeing, kayaking, fishing and swimming. The floodplain and VTDEC River Corridor associated with the Lamoille are shown on Figure 2.3. A significant portion of the AOI is comprises the floodplain and river corridor, from the Main Street and Railroad Street intersection to the Lamoille River because of the proximity of the Gihon River to the northwest of the AOI. The floodplain and River Corridor also extend along River Road East through the AOI. The western end of Railroad Street is also in the floodplain and river corridor, containing the only wetland mapped within the AOI.

No wildlife habitats or protected plant species are reported in the AOI.

2.1.1.3 Utilities and Infrastructure

Electricity is provided to the entire AOI via the Village Water & Light Department which also provides power to an area slightly larger than the Village boundary. Three phase electricity is available along Railroad Street from Main Street to the junction with River Road, and along River Road. The Village utility obtains its power from outside sources.

Wastewater collection and treatment is provided by the Village Wastewater Treatment Facility (WWTF) built in 1995, originally designed with a capacity of 270,000 gallons per day. In 2015 the WWTF operated at approximately 49% of its capacity. The collection system along Railroad Street comprises pipes with a diameter of 10 inches or greater, which is sufficient to support small to medium flows of industrial effluent. Overall, the collection system is reported to be in good condition, and an upgrade to the aging pumping station near the former talc mill/DPW garage has been designed and is planned for installation in the next several years. However, no sanitary sewer service is currently provided along River Road East, and it is assumed that the buildings along this road are served by on-site soil based disposal systems.

Water is provided to the entire AOI via the Village municipal system which currently has approximately 302,000 gallons per day of excess capacity. The water distribution system is designed to provide both potable and firefighting flows to the entire AOI. The AOI is served by 8- and 12-inch pressurized main water pipe, capable of servicing commercial and industrial uses. The Manchester Mill building on River Road East has a 6-inch sprinkler main and 1-inch copper potable water service. The remaining buildings on River Road East are serviced via a 1-inch copper line.

Main Street is State of Vermont Highway Route 15, with Railroad Street and River Road East being Class 2 roads. Railroad Street has room for parking on both sides, from Main Street as far as the Lamoille River crossing. Road width from there to the DPW garage is narrower, with limited room for street-side parking.

Railroad Street from Main Street to the junction with French Hill Road is served by the Johnson Shopper Transit Bus Route. This transit resource brings riders to various areas in Johnson, including the Downtown district, which allows passengers to connect with transport resources serving the surrounding county. The Lamoille Valley Rail Trail bisects the AOI just south of the Lamoille River and reenters the AOI near the former Talc Mine adjacent to the recreation fields to the south.

2.1.1.4 Environmental Conditions

To understand the use history of the parcels and identify known or suspected environmental impact risks to the AOI, a limited historical review was conducted. This included the examination of available Sanborn fire insurance maps (years 1887, 1897, 1904, 1909, 1925, and 1936). However, should be noted that the fire insurance map coverage is limited and that no coverage exists for the westernmost portion of the proposed project limits near the location of the former Cyprus Minerals facility. A review of the Vermont Department of Environmental Conservation (VTDEC) hazardous site, underground storage tank and Brownfields databases was performed, and members of the local historical society were interviewed.

The results of this research indicate that there are four primary areas within the AOI with historic uses which have either identified, or potential for, environmental impacts. These areas are identified as:

- Main and Railroad Street intersection
- Former Manchester Lumber Mill
- Parker and Stearns
- Former Cyprus Minerals

Each of these locations are discussed in more detail below.

Main and Railroad Street - The eastern portion of Railroad Street at, and in the vicinity of, the intersection with Main Street has been developed for mixed commercial and residential uses since at least 1868. A review of the available fire insurance maps revealed no high-risk uses within the proposed project limits. A millinery shop was operated at the location of the current Johnson Laundromat at 6 Railroad Street from sometime before 1887 to sometime between 1909 and 1925. The millinery building was labeled as "Millinery and Fancy Goods" on the 1909 Sanborn map and is now understood to be a woman's hat and clothing store, rather than a hat manufacturer. The local town historians were not aware of this hat shop, and did not believe that a hat manufacturer ever operated in the town.

Current high risk uses identified within the AOI at the Main and Railroad Street location are limited to the auto repair facility (Main Street Auto), located at 93 Lower Main Street, Danger House; Customs/Johnson Paint & Auto Body, located at 152 Railroad Street and a laundromat which is located at 6 Railroad Street. Auto repair and body work utilize numerous hazardous materials which, if not properly handled and disposed of, can result in negative environmental impacts. While the laundromat is reported to not have been used for dry cleaning activities, it is our experience that these types of facilities have had individual coin operated dry cleaning units in the past. Dry cleaning solvent is a hazardous material and is often found associated with laundromats. No information regarding past investigation of environmental conditions at these locations was found in the databases searched.

Potential contaminants in this area include: petroleum, chlorinated solvents, polycyclic aromatic hydrocarbons (PAHs), metals, and polychlorinated biphenyls (PCBs.)

Former Manchester Lumber Mill:

The former Manchester Lumber mill is located on River Road East. The mill historically manufactured board stock from logs delivered to the facility. No wood treating or preservation is reported to have occurred at this facility. However, a 10,000-gallon underground storage tank is reported to exist at the facility, and machinery included large electric motors and hydraulic systems. Rail line access along the facility is also evident. Cooling and hydraulic oils associated with the machinery and railroad could have been released through routine maintenance or inadvertent spillage.

Potential contaminants in this area include: petroleum, chlorinated solvents, polycyclic aromatic hydrocarbons (PAHs), metals, and polychlorinated biphenyls (PCBs.)

Parker and Stearns:

The Parker and Stearns facility has been operating as a lumber and hardware supply outlet for many decades. Currently suppliers of lumber, they previously manufactured flooring, windows, doors and lumber. The former Johnson Depot serving the Lamoille Railroad was previously located at this facility. The facility is located along the former Lamoille Valley Railroad bed and appears to have received shipments via rail. Storage and handling of paints and stains are unlikely to have caused significant contamination. Proximity to the former railroad depot means that railroad related contaminants such as oils, PAHs and arsenic could be present.

Former Cyprus Minerals:

The former Cyprus Minerals facility at the western end of the project area is a currently recognized hazardous site by the VTDEC. The facility is being partially utilized by the Town as a Department of Public Works Garage. It was first developed by the American Mineral Company as a talc mine and processing facility as early as 1907. At the time of the first environmental investigation at the site in 1989, the facility was operating as Cyprus Industrial Minerals. In 1996, one 15-acre parcel which contained the old talc mill site and associated structures was sold to the Town and Village of Johnson. In 2003, the remaining 180.5 acres were sold to the Town and Village.

Generally, raw material was mined from just south of the mill area and in East Johnson, delivered to the mill where it was processed into various industrial products. Water necessary for the processing was pumped from the Lamoille River and the w Wastewater from the processing was pumped into settling ponds to the northeast of the mill (now the recreation fields). The sludge settled from the process water and tailings are known to contain high levels of arsenic (As) and nickel (Ni). Evidence of process water/sludge/tailings overflow into the adjacent Lamoille River and evidence of buried tailings adjacent to the river has been noted. These heavy metals also leach from the sludge/tailings into infiltrating storm water and are transported to and with groundwater, ultimately discharging into the river. Additional contamination at the site includes petroleum from several underground storage tanks. It appears that this contamination may have penetrated into the bedrock beneath the property. The extent and degree of metals and petroleum contamination at the facility is unknown. There is also the potential for railroad related contaminants and PCBs to be present.

Figure 2.1.1 Overview of Study Area

Figure 2.2 Village Planning Districts

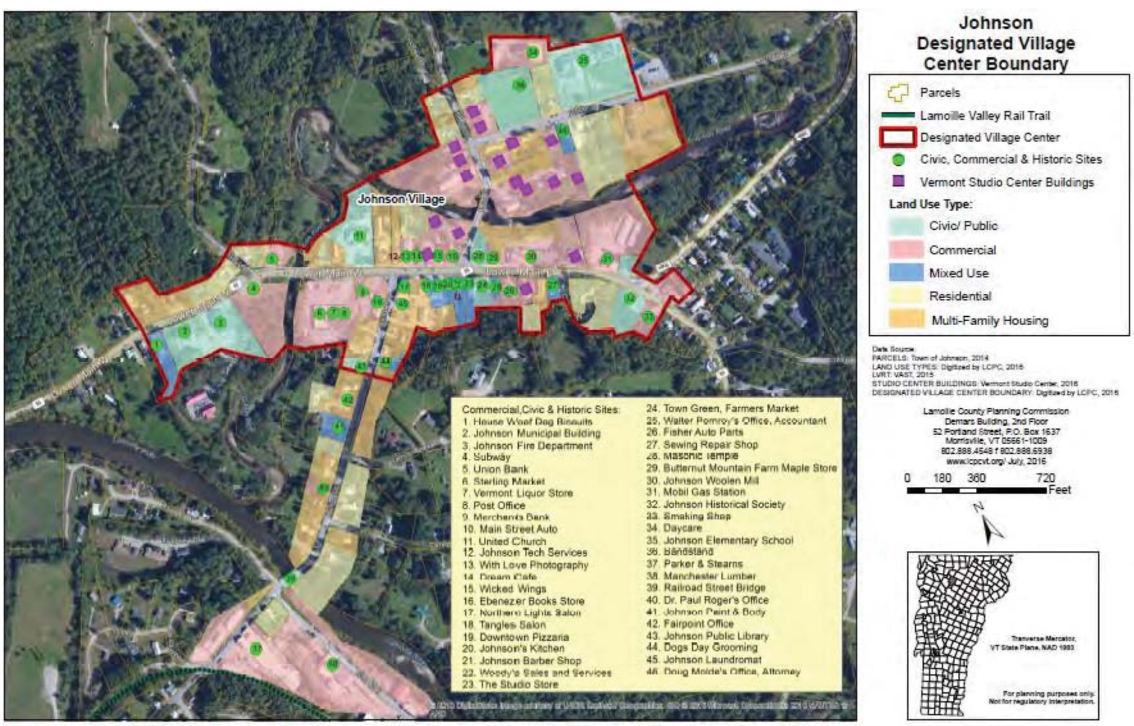


Figure 2.3 Floodplain and Study Area

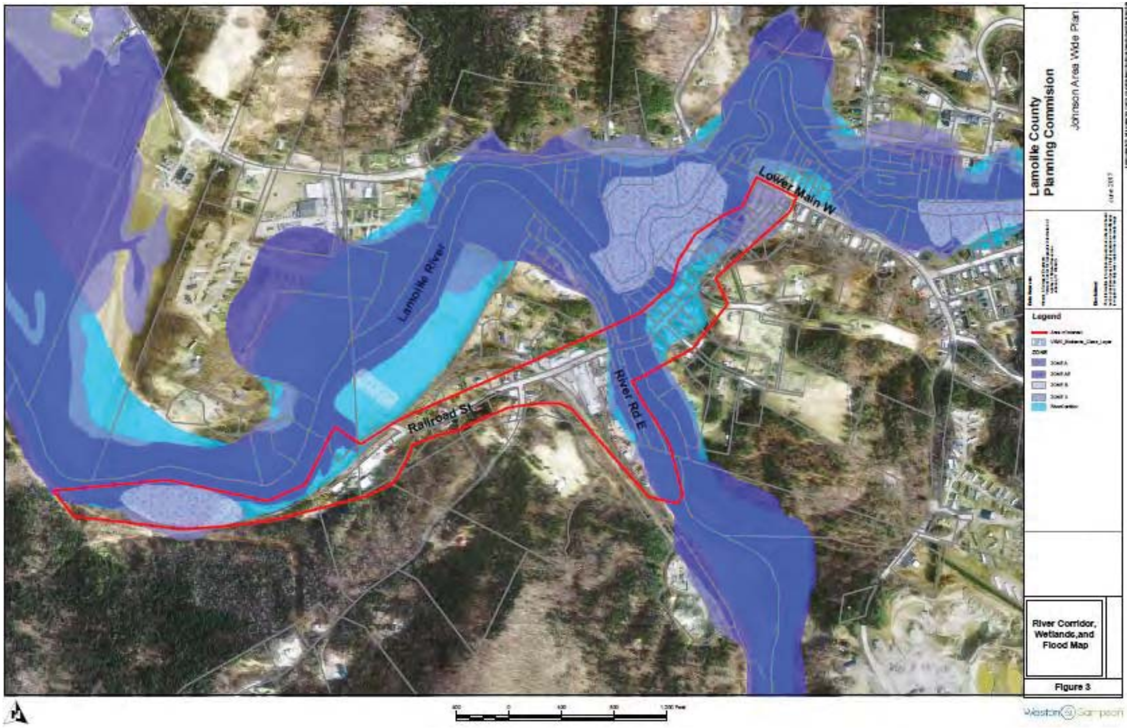


Table 2.2: Summary of Impacted Parcels

Project Lot Name	Johnson Auto Repair	Manchester Lumber	Former Cyprus Mill/DPW
Address	93 Lower Main Street West	66 River Road East	661, 663, 665 Railroad Street
Lot Number	21-01-26	10-02-04	10-01-90
Owner	Robert Hoag	Manchester Investments, Inc.	Town of Johnson
Acerage	0.49 Village	14.19 Total	
In AOI = 2.15 Village, 3.0 Town	188 Total (3 lots)		
In AOI = 2.4 Village,			
Current Use	Auto Repair	Former Lumber Mill	DPW Garage
Use District(s)	Village Main Street Storefront	Village Industrial	Village Lower Village
Town Agricultural			
Town Village			
Water	Municipal	Municipal	Municipal
Wastewater	Municipal	Private, Unknown	Municipal
Topography	Flat	Flat on West sdie of road	
sloping to river east side of road	Terraced, sloping to river to North		
Floodplain	Yes	Small portions on east side of road	Yes, North of Rail trail Only
River Corridor	Yes	West side partial(most of building in RC	
East side = Yes	Yes, North of Rail trail Only		
Wetlands	No	No	Yes, North of Rail trail Only

Contaminant Presence	Unknown. Long history of auto repair makes it likely contaminants are present	Unknown. An old UST is present and hydraulics utilized.	Yes. Petroleum, Metals and potentially PCBs
Property Card Link	https://www.axisgis.com/Reporting/Reports/0ecb3b76-6091-4e3d-a849-271ef69582dereport.pdf		
https://www.axisgis.com/Reporting/Reports/14c84801-94ff-4c16-85f9-ae6c8b1f9629report.pdf			
N/A			
Comments		Building is sprinkled. Water service is currently limited by small potable water service to Mill and other buildings south. Rail trail abuts west property line. Also own 17 acres to the west adjoin AOI lot.	Additional investigation of contamination is required. Much of the upland portion of the property outside the AOI is part of Johnson Town Forest.

Table 2.3: All Parcels in Study Area.

Parcel #	Acres	Use Code	Address of Parcel	Address of owner	Land	Building	Total
21-01-41	0.34	C	103 Lower Main W	Merchants Bank C/O Neville Co, Inc 30 Kimball Ave, Suite 101 So. Burlington, VT 05403	$84,000	$405,700	$489,700
21-01-26	0.49	C	93 Lower Main W	Robert Hoag PO Box 352 Johnson, VT 05656	$41,800	$167,100	$208,900
21-01-19	0.31	CA	51 Lower Main W	Gilles & Laura Lehouillier 456 Sinclair Rd Johnson, VT 05656	$67,200	$161,700	$1,682,900
21-01-20	0.1			Lehoullier			
21-01-21	0.05			Lehoullier			
21-01-22	0.1			Lehoullier			
21-01-23	0.27			Lehoullier			
21-01-24	0.8	R1	43 Railroad St	Richard & Pamela Aupperlee PO Box 58 Johnson, VT 05656	$30,500	$96,900	$127,400
20-01-42	0.15	R1	58 Railroad St	Jeff Mongeon 263 Colchester Pond Rd. Colchester, VT 05446	$27,000	$197,700	$224,700
20-01-43	0.26	R1	60 Railroad St	Railroad Street, LLC PO Box 411 Johnson, VT 05656	$27,500	$152,600	$180,100
20-01-44	0.37			Gerald Bellavance			
20-01-45	0.26	R1	31 Library St	Earl Smith PO Box 494 Johnson, VT 05656	$22,300	$115,800	$138,100
20-01-46	0.21	C	7 Library St	Town of Johnson PO Box 383 Johnson, VT 05656	$27,500	$8,000	$35,500
20-01-47	1.24	R1	32 Library St	Jerry Williams 2 Sunset Ave Montpelier, VT 05602	$26,500	$166,000	$192,500
20-01-48	0.4	R1	124 Railroad St	Saratoga Properties, LLC 716 Oakes Rd Waterville, VT 05492	$28,500	$157,600	$186,100

20-01-49	0.14	UO	136 Railroad St	Telephone Operating Company of Vermont LLC 770 Elm St Manchester, NH 03101	$27,000	$146,600	$173,600
20-01-50	0.25	R1	146 Railroad St	146 RRJ LLC C/O Peggy Brown 8306 Wilshire Blvd. #1806 Beverly Hills, CA 09211	$27,500	$174,500	$202,000
20-01-51	1.07	R1	152 Railroad St	Cynthia Hennard 152 Railroad St Johnson, VT 05656	$32,200	$153,500	$185,700
20-01-52	0.32	R1	180 Railroad St	David Tomere 2109 Broadway Apt 8131 New York, New York 10023	$28,000	$117,600	$145,600
20-01-53	1.02	R1	208 Railroad St	Seth Manchester 208 Railroad St Johnson, VT 05656	$32,100	$181,200	$213,300
20-01-54	0.58	R1	224 Railroad St	Paul Rogers MD 224 Railroad St Johnson, VT 05656	$29,000	$188,100	$217,100
20-01-55	0.58	R1	264 Railroad St	Susan Conger 264 Railroad St Johnson, VT 05656	$29,000	$139,800	$168,800
20-01-67	0.13	R1	24 Lamoille View Dr	Susan McGovern 24 Lamoille View Dr Johnson, VT 05656	$29,700	$82,800	$112,500
20-01-68	0.22	R1	157 Railroad St	Randall Mulligan 591A Crickett Hill Rd Hyde Park, NY 05655	$27,500	$146,100	$173,600
20-01-69	1.15	R1	65 Lamoille View Dr	Russell Longtin 65 Lamoille View Dr Johnson, VT 05656	$39,600	$231,000	$270,600
20-01-72	0.28	R1	139 Railroad St	Morgan Mullins PO Box 327 Johnson, VT 05656	$27,500	$125,000	$152,500
20-01-73	0.2	R1	111 Railroad St	Devon Plumley PO Box 593 Johnson, VT 05656	$27,500	$69,800	$97,300
20-01-74	0.37	R1	95 Railroad St	Randall Mulligan 591A Crickett Hill Rd Hyde Park, NY 05655	$28,000	$157,800	$185,800

20-01-75	0.21	R1	89 Railroad St	Midfirst Bank 999 NW Grand Blvd Oklahoma City, VT 73118	$27,500	$89,900	$117,400
20-01-76	0.34	CA	77 Railroad St	William Jennison 118 Lower Main W Johnson, VT 05656	$56,000	$188,200	$244,200
20-01-77	0.13	CA	59 Railroad St	Gerald Bellavance 5471 VT RT 15 Wolcott, VT 05680	$27,000	$376,000	$403,000
22-01-25	2.74	R1	297 Railroad St	Dale & Rhoda Mingledorff PO Box 402 Johnson, VT 05656	$37,400	$248,400	$285,800
22-01-35	0.21	R1	46 Clark Ave	Lorraine McGown 46 Clark St Johnson, VT 05656	$30,300	$112,800	$143,100
22-01-36	0.38	R1	18 Clark Ave	Larry Klingensmith 18 Clark Ave Johnson, VT 05656	$30,800	$186,900	$217,700
22-01-37	1	CA	294 Railroad St	Thomas Wolfe Janet Jaffe 1248 Osgood Hill Rd Westford, VT 05494	$48,000	$470,500	$518,500
22-01-38	0.67	R1	274 Railroad St	Lloyd & Ginger Bedell 274 Railroad St Johnson, VT 05656	$26,600	$105,900	$132,500
22-01-39	0.53			Steven Benford			
22-01-40	0.44	R1	233 Railroad St	Steven Benford 233 Railroad St Johnson, VT 05656	$28,500	$276,900	$305,400
22-01-41	0.9	R1	213 Railroad St	Francis Sladyk C/O Mary Sladyk 213 Railroad St Johnson, VT 05656	$31,000	$142,300	$173,300
22-01-42	1.7	R1	46 Lamoille View Dr	David & Nancy Goddette PO Box 271 Johnson, VT 05656	$44,200	$125,000	$169,200
10-02-01	18.23	R2	81 Upper French Hill Rd	Manchester Investments, Inc PO Box 304 Johnson, VT 05655	$75,600	$124,300	$199,900
10-02-04	14.19	I	66 River Road E	Manchester Investments, Inc PO Box 304 Johnson, VT 05656	$163,500	$1,049,700	$1,213,500

22-01-21	4.72	C	405 Railroad St	Parker & Stearns, Inc PO Box 615 Johnson, VT 05656	$115,000	$504,000	$619,000
22-01-22	0.66	R1	21 River Road W	Ian Turkle Amy Holibaugh 112 Whitcomb Island Rd Hyde Park, VT 05655	$29,500	$122,800	$152,300
22-01-22-01	0.7	R1	103 Creamery Rd	Courtland Perry Cynthia Hamblin-Perry 103 Creamery Rd Johnson, VT 05656	$30,000	$204,600	$234,600
22-01-23	0.8	R1	369 Railroad St	Norman & Michael Peatman Manchester Investments, Inc PO Box 4 Johnson, VT 05656	$30,500	$105,400	$135,900
22-01-08	0.78	MHL	13 Upper French Hill Rd	Ralph & Barbara Backus 13 Upper French Hill Rd Johnson, VT 05656	$30,000	$87,300	$117,300
10-01-98	0.9	R1	22 Upper French Hill Rd	Sadye Easler 22 Upper French Hill Rd Johnson, VT 05656	$31,000	$113,600	$144,600
22-01-04	1.02	M	575 Railroad St	Benoit Pothier 921 West Berkshire Enosburg, VT 05450			
22-01-03-01	0.87	MHL	593 Railroad St	Valerie Koval 593 Railroad St Johnson, VT 05656	$27,500	$18,000	$45,500
22-01-02	0.59	R1	629 Railroad St	Edward & Valerie Dolan 629 Railroad St Johnson, VT 05656	$32,500	$76,900	$109,400
10-01-96	5.42	W	0 Upper French Hill Rd	Robert & Donna Laraway PO Box 245 Valrico, FL 33595	$36,800	$-	$36,800
10-01-90	188			Town of Johnson PO Box 383 Johnson, VT 05656			
22-01-15	0.38	R1	492 Railroad St	Barbara & Lorraine 492 Railroad St Johnson, VT 05656	$28,000	$117,200	$145,200

22-01-14	0.54	R1	500 Railroad St	Andrew & Maria Churchill 22 Sinclair Rd Johnson, VT 05656	$29,000	$48,400	$77,400
22-01-13	0.84	R1	552 Railroad St	Diane Geoffroy 2539 Upper French Hill Rd Cambridge, VT 05444	$30,500	$128,900	$159,400
22-01-12	0.84	R1	582 Railroad St	Dedra Dolan 582 Railroad St Johnson, VT 05656	$30,500	$200,500	$231,000
22-01-11	0.65	MHL	608 Railroad St	Perley & Nancy Herman 608 Railroad St Johnson, VT 05656	$29,500	$48,700	$78,200
22-01-09-01	0.5	MHL	634 Railroad St	Laurie Herman 634 Railroad St Johnson, VT 05656	$26,100	$87,500	$113,600

3 LABOR MARKET, WAGES, INCOME, AND EMPLOYMENT TRENDS

3.1 *Labor Market Area:*

The Morristown-Stowe labor market area (LMA) changed to the Morristown-Waterbury LMA but includes the same towns.

Labor Market Areas are determined by combining population data and commuting patterns. The title of each area is based on the town(s) forming the core area or urban cluster. Vermont has three different labor market area types: metropolitan, micropolitan and small labor market areas. In New England, labor market areas are called New England City and Town Areas (NECTAs), as they are based on cities and towns. In the remainder of the country, counties are the basis for LMAs. Johnson is part of the Morristown-Waterbury LMA (Figure 3.1). A labor market area is the geography used to conduct economic analysis of a municipality. It provides a more comprehensive understanding of the dynamic involved in labor, employment, and wages.

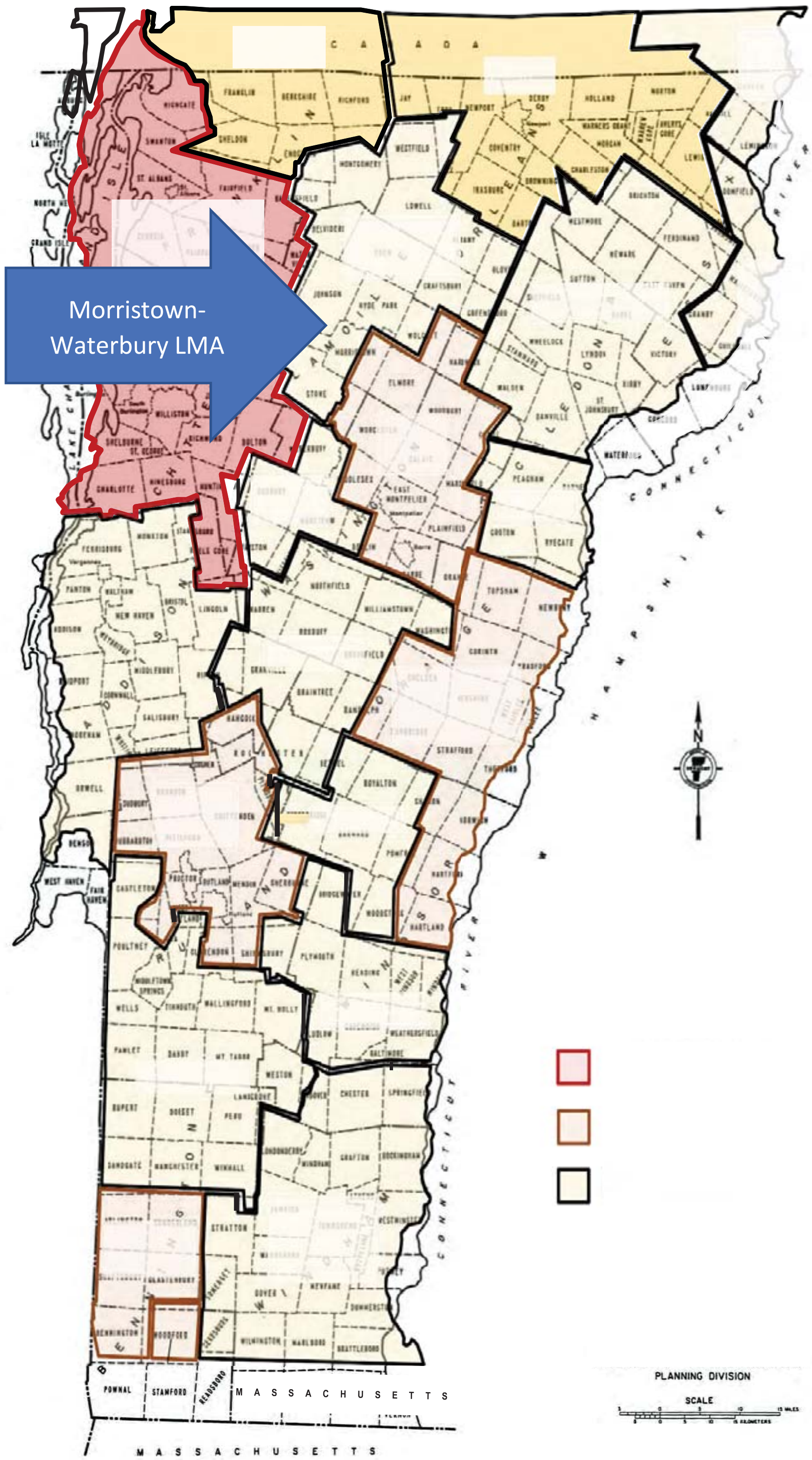
Table 3.1: Municipalities in the Labor Market Area

Morristown- Waterbury VT LMA	Belvidere, VT
	Craftsbury, VT
	Eden, VT
	Elmore, VT
	Greensboro, VT
	Hardwick, VT
	Hyde Park, VT
	Johnson, VT
	Lowell, VT
	Morristown, VT
	Stowe, VT
	Waterbury, VT
	Waterville, VT
	Wolcott, VT

3.2 *Statewide Overview:*

The labor market continued to improve in 2016. Seasonally adjusted total non-farm payroll employment increased by 2,200 (0.7%) to 313,900 between December of 2015 and 2016. Private sector employment increased 1,900 (0.7%) while government employment increased by 300 (0.5%). This represents the seventh straight year of employment gains in the Current Employment Statistics series. Employment gains were concentrated in Accommodation & Food Service (+1,500), Health Care & Social Assistance (+700), Other Services (+500) and Arts, Entertainment & Recreation (+400). The largest losses were found in Durable Goods Manufacturing (-1,200), Administrative & Waste Services (-400) and Transportation, Warehousing & Utilities (-400).

Figure 3.1: Labor Market Areas of Vermont



The statewide seasonally adjusted unemployment rate fell from 3.4% in December of 2015 to 3.2% in December of 2016, the lowest unemployment rate since May of 2001. The comparable national unemployment rates were 5.0% in December 2015 and 4.7% in December 2016. The labor force, which had declined every year since 2010, increased by 950 persons over the year. The increase was driven exclusively by the number of employed persons which increased 1,550, the first increase in employed persons since 2010. The number of unemployed persons fell by 650 to 10,900, the seventh straight year of decline and the lowest number of unemployed persons since May of 2001.

After peaking at 7.0% in May of 2009, the unemployment rate has gradually declined for almost 8 years. The number of unemployed persons peaked at 25,200 in May of 2009 and, as mentioned, has declined in every year since.

The number of employed persons has not experienced as much improvement, growing unsteadily between 2009 and 2011 (from 335,900 in May 2009 to 338,750 in February 2011). It declined in similar unsteady fashion until October of 2015, at which point the number of employed persons stood at a post-recession-era low of 332,500. It has since recovered some of those losses, increasing to 334,200 by December 2016.

3.3 Labor Market Areas

While most areas of the state experienced an increase in employed persons, the largest growth was once again in the Burlington - South Burlington Labor Market Areas (LMA) where the number increased by 1,750 or 1.4%. Other areas with large percentage increases in the number of employed persons include Middlebury (up 2.6%), White River Junction (up 1.9%), and Morristown-Waterbury (up 1.8%). The number of unemployed persons either remained flat or fell in every LMA. The largest declines were seen in Burlington- South Burlington (-300 over the year), Barre-Montpelier (-150) and Brattleboro (-100).

Labor force data for labor market areas is not seasonally adjusted. See Table 3.2 for a comparison of LMA data for December 2015 and 2016.

Table 3.2: Labor Force Data, December Comparison

Labor Market Area	Year	Labor Force	Employed	Un-employed	Un-employment Rate (%)
Barre-Montpelier	2016	25,600	24,900	700	2.7
	2015	25,400	24,600	850	3.3
Bennington	2016	10,850	10,500	400	3.5
	2015	10,950	10,500	450	4.3
Brattleboro	2016	22,500	21,900	600	2.7
	2015	22,500	21,800	700	3.2
Burlington-South Burlington	2016	125,350	122,650	2,700	2.1
	2015	123,900	120,900	3,000	2.4
Colebrook, NH-VT (Vt part)	2016	500	450	50	7.5
	2015	550	500	50	6.7

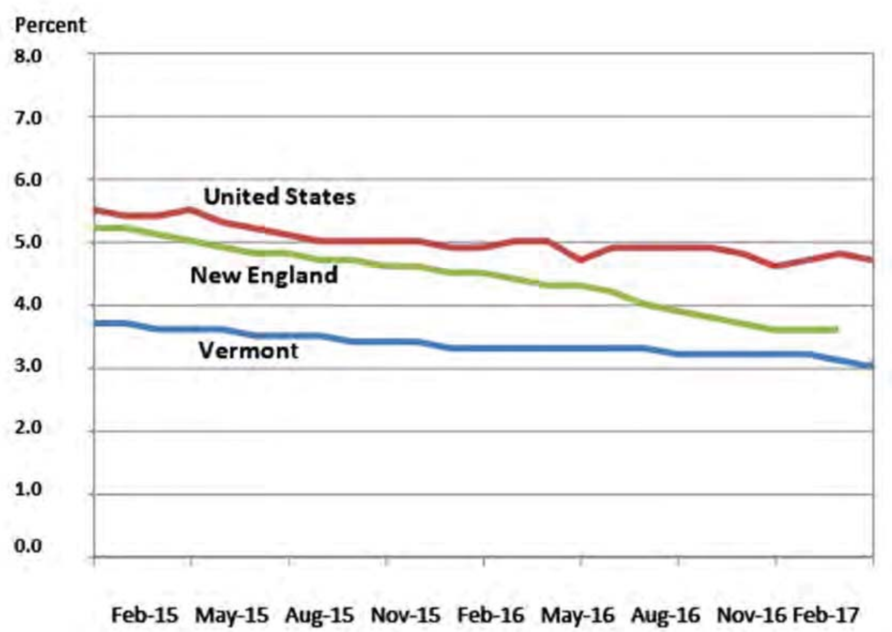
Derby	2016	12,500	11,850	650	5.0
	2015	12,500	11,750	700	5.7
Highgate	2016	10,000	9,650	350	3.3
	2015	9,950	9,600	350	3.4
Littleton, NH-VT (Vt part)	2016	850	850	50	4.0
	2015	850	800	50	3.9
Manchester	2016	11,600	11,250	350	3.1
	2015	11,600	11,150	450	3.8
Middlebury	2016	18,300	17,750	550	2.9
	2015	17,900	17,300	600	3.4
Morristown-Waterbury	2016	17,350	16,700	700	4.0
	2015	17,100	16,400	750	4.2
Newbury	2016	2,750	2,650	100	3.1
	2015	2,700	2,650	100	3.1
Northfield-Waitsfield	2016	6,900	6,750	200	2.7
	2015	6,950	6,750	200	3.1
Randolph	2016	7,250	7,050	200	3.1
	2015	7,400	7,150	250	3.5
Rutland	2016	22,050	21,350	650	3.0
	2015	21,850	21,150	700	3.2
Springfield	2016	10,750	10,450	300	2.8
	2015	11,050	10,700	350	3.0
St. Johnsbury	2016	13,350	12,850	500	3.8
	2015	13,250	12,700	550	4.1
White River Junction	2016	19,550	19,150	400	2.1
	2015	19,200	18,800	450	2.2
Woodstock	2016	4,050	3,950	100	3.0
	2015	4,300	4,200	150	3.1

Source: Vermont Department of Labor

3.4 Unemployment

The February 2017 seasonally adjusted statewide unemployment rate stood at 3.0%, down one tenth of a point from January and three-tenths of a point from the same month last year. The labor force increased by 800 over the month, composed of a 150-person reduction in unemployment and a 900-person increase employment (figures may not sum due to rounding). February's labor force was 2,650 people larger than the same time last year.

Figure 3.2: Unemployment Rate, seasonally adjusted



The not-seasonally-adjusted unemployment rate for February was 3.4% statewide, a two-tenths of one point decline relative the same period last year. The Burlington-South Burlington LMA continues to have the lowest unemployment rate at 2.4%, a decline of two-tenths of a point over the month and the year. The Derby LMA has the highest rate, 7.2%. This is a three-tenths decline over the year. In addition to Burlington-South Burlington, four other LMAs have unemployment rates below 3%: Brattleboro (Vermont part, 2.9%), Lebanon (Vermont part, 2.5%), Springfield (2.9%) and Woodstock (2.5%). The most significant over-the-year declines were in the North Adams LMA (Vermont part, -1.8 %), Colebrook (VT part, -0.9), St. Johnsbury (-0.6). One LMA experienced an increase in the unemployment rate over the year: the Vermont part of Littleton, NH which increased from 4.9% to 5.4%.

3.5 EMPLOYMENT

3.5.1 Labor Force Participation

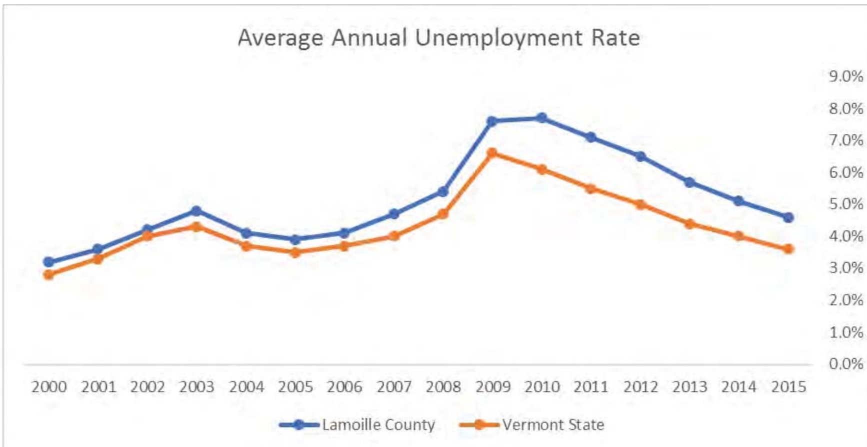
There are approximately 13,745 residents participating in the labor force (i.e., employed or actively looking for work) out of 20,365 residents age 16 and over. This means the county has a labor force participation rate of about 67% in 2015.

3.5.2 Unemployment Rate

Of the county residents in the labor force, an average of 4% was unemployed in 2015. These are residents who want to work and are looking for jobs.

As shown below, the unemployment rate peaked in 2003 and 2009/10. It has trended slightly upward between 2000 and 2015 for Lamoille County and Vermont State. Last 5 years however, have seen a constant decline in the unemployment rate.

Figure 3.3: Average annual unemployment rate



The average annual unemployment rate in Vermont State has remained lower than that of Lamoille County.

3.5.3 Job Types

The most common type of job in Lamoille County is that in the Leisure and Hospitality category. About 34 percent of employed residents have jobs in this category especially those providing for "Accommodation and food services" followed by "Trade, Transportation, and Utilities" sector jobs at 19% won mostly by those providing "Transportation and warehousing" support.

Private wage and salary workers make up the majority of the workforce. Just over 86% of employed residents work in this sector compared with 10% working as local government employees.

3.5.4 Industry Employment

The tables below provide a breakdown of employment in Lamoille County, including jobs outside of Lamoille County to which residents commute.

"Leisure and Hospitality" is the industry with the greatest number of Lamoille County workers with 34% of the county workforce employed in this sector. "Trade, Transportation, and Utilities" ranks second, followed closely by "Education and Health Services" each employing about 18% and 17% of the county workforce respectively.

"Non-Durable Goods manufacturing," "Information," "Educational services" and "Real estate and rental and leasing" are the industries with the fewest number of workers. Along with "Professional and technical services" and "Finance and insurance" these industries each have less than 5% of the Lamoille County workforce.

Lamoille County has seen the largest fall in employment as has the federal government sector. The private sector on the other hand, with a consistent number of establishments has seen growth both in terms of the number of jobs created and the total annual payroll over the period of 10 years from 2005 to 2015.

3.5.5 Change in Industry Employment

Table 3.4 below shows the trends in the industries in which Lamoille County residents are employed. The industry with the greatest percent change in employment is "Natural Resources and Mining" Approximately triple the workers have jobs in this sector compared to 2005. "Professional and technical services" experienced the second greatest percent increase in number of workers with 18% change.

"Professional and Business Services" industry has seen a tremendous employment growth in last 10 years. "Natural Resources and Mining" too observed huge growth in this period though only limited growth in last 5 years. These are therefore the potential business opportunities for the county and State to focus on.

The greatest percent decrease in employment was in the "Non-Durable Goods manufacturing" industry, which saw a decline of 43%. The second greatest percent decrease was in "Real estate and rental and leasing"," Educational services"," Health care and social assistance" each having a fall of about 20% over the period 2005 to 2015.

"Manufacturing", "Trade, Transportation, and Utilities"," Information" and "Financial activities" industries are important because there might be issues that the industries are facing that need to be addressed as they are constantly losing their growth share over a period. "Trade, Transportation, and Utilities" and "Financial activities" losing the jobs faster that the state.

Figure 3.4: Lamoille County - Job Patterns (2005-2015)

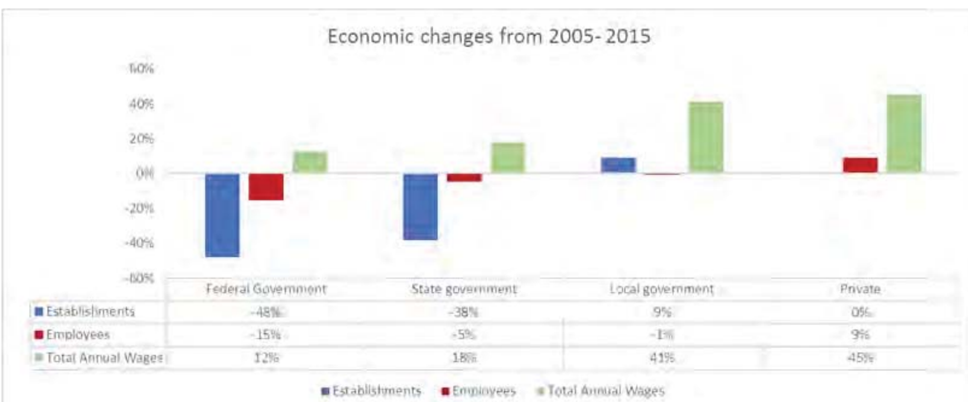
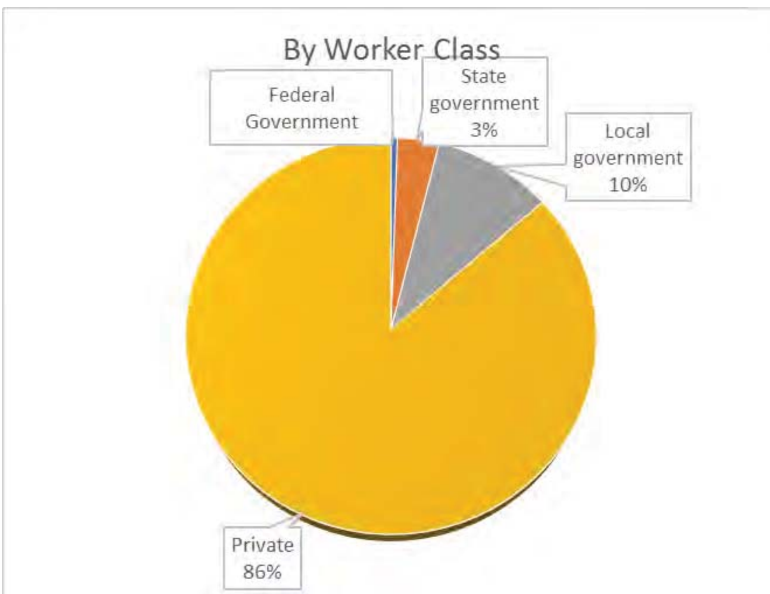


Table 3.3: Jobs and Wages by major Sector

	Establishments				Employees				Total Annual Wages			
	2005	2015	Chg	Chg %	2005	2015	Chg	Chg %	2005 ('000)	2015 ('000)	Chg	Chg %
Federal Government	27	14	-13	-48%	72	61	-11	-15%	2,677	3,009	332	12%
State Government	13	8	-5	-38%	420	401	-19	-5%	14,435	16,999	2,564	18%
Local Government	34	37	3	9%	1,157	1,147	-10	-1%	34,677	49,054	14,377	41%
Private	1,018	1,016	-2	0%	9,366	10,214	848	9%	252,672	367,108	114,436	45%
Total	1,092	1,075	-17	-2%	11,015	11,823	808	7%	304,461	436,170	131,709	43%

Table 3.3 shows the number of jobs in Lamoille County by private or public-sector jobs (federal, state, or local). Over the ten-year period shown, the county observed an increase of 7% in its total jobs. Jobs increased in the private sector and were lost at each level of government. Local government lost 10 jobs (1%), the least amount out of job loss in all government sectors.

Figure 3.5:



The total annual wages paid to workers declined by 5% during the period. Local government wages decreased the most (10%).

Table 3.4: Lamoille County - Business Patterns (2005-2015)

	Establishments				Employees				Total Annual Wages			
	2005	2015	Chg	Chg %	2005	2015	Chg	Chg %	2005 ('000)	2015 ('000)	Chg	Chg%
Goods Producing domain	242	213	-29	-12%	1,639	1,566	-73	-4%	52,273	67,308	15035	29%
Natural Resources and Mining supersector	16	19	3	19%	66	191	125	189%	1,201	6,706	5505	458%
Agriculture, forestry, fishing and hunting	13	18	5	38%	0	0	0	0%	-	-	0	0%
Mining	3	2	-1	-33%	0	0	0	0%	-	-	0	0%
Construction supersector	174	149	-25	-14%	913	791	-122	-13%	29,663	34,061	4398	15%
Manufacturing supersector	52	44	-8	-15%	660	584	-76	-12%	21,409	26,541	5132	24%
Durable Goods manufacturing	34	23	-11	-32%	447	463	16	4%	16,742	23,641	6899	41%
Non-Durable Goods manufacturing	18	22	4	22%	213	121	-92	-43%	4,667	2,900	-1767	-38%
Service Providing domain	776	803	27	3%	7,727	8,648	921	12%	200,399	299,800	99401	50%
Trade, Transportation, and Utilities supersector	228	213	-15	-7%	1,773	1,895	122	7%	45,715	62,982	17267	38%
Wholesale trade	31	48	17	55%	0	184	184	0%	-	10,278	10278	0%
Retail trade	171	141	-30	-18%	1,501	1,495	-6	0%	35,068	40,205	5137	15%
Transportation and warehousing	25	23	-2	-8%	107	0	-107	-100%	2,093	-	-2093	-100%
Utilities	2	1	-1	-50%	0	0	0	0%	-	-	0	0%
Information supersector	17	17	0	0%	106	115	9	8%	3,354	6,349	2995	89%
Financial Activities supersector	64	59	-5	-8%	365	326	-39	-11%	13,095	17,429	4334	33%

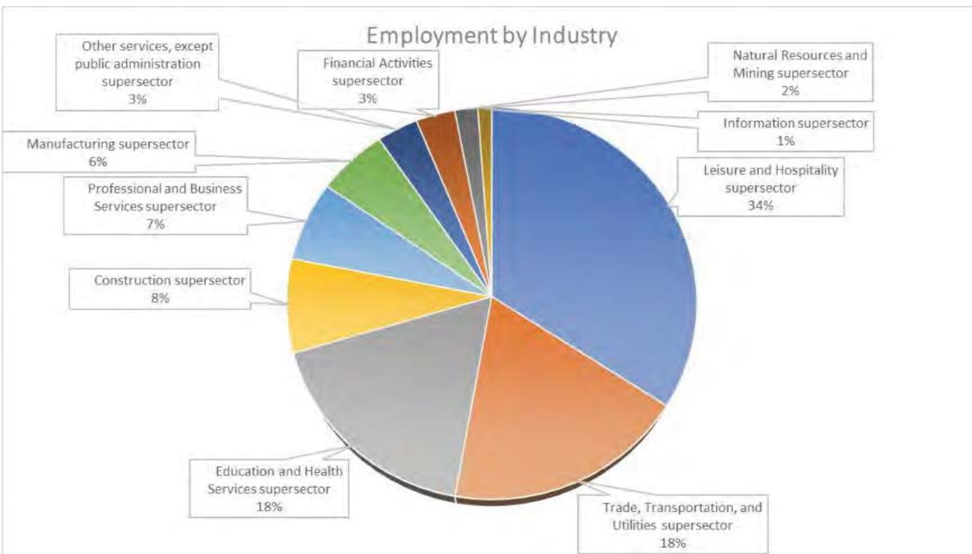
Finance and insurance	26	29	3	12%	212	203	-9	-4%	7,993	11,811	3818	48%
Real estate and rental and leasing	38	30	-8	-21%	153	123	-30	-20%	5,102	5,618	516	10%
Professional and Business Services supersector	159	210	51	32%	574	676	102	18%	20,657	37,313	16656	81%
Professional and technical services	106	121	15	14%	298	351	53	18%	12,004	21,116	9112	76%
Management of companies and enterprises	0	5	5	0%	0	0	0	0%	-	-	0	0%
Administrative and waste services	53	83	30	57%	275	0	-275	-100%	8,653	-	-8653	- 100%
Education and Health Services supersector	93	89	-4	-4%	1,555	1,798	243	16%	48,909	73,740	24831	51%
Educational services	17	12	-5	-29%	161	129	-32	-20%	3,298	3,342	44	1%
Health care and social assistance	76	77	1	1%	1,394	1,669	275	20%	45,611	70,398	24787	54%
Leisure and Hospitality supersector	126	134	8	6%	3,002	3,495	493	16%	60,317	91,933	31616	52%
Arts, entertainment, and recreation	24	25	1	4%	123	136	13	11%	2,690	3,326	636	24%
Accommodation and food services	103	109	6	6%	2,880	3,359	479	17%	57,627	88,607	30980	54%
Other services, except public administration supersector	89	82	-7	-8%	352	343	-9	-3%	8,352	10,054	1702	20%
Unspecified industry supersector	0	0	0	0%	0	0	0	0%	-	-	0	0%
Total	1,018	1,016	-2	0%	9,366	10,214	848	9%	252,672	367,108	114,436	45%

3.5.5.1 Businesses

There were 1,075 businesses in Lamoille County as of 2015, a slight decrease of 2% from 2005. The "Retail Trade" industry has the greatest number of businesses with 141. "Professional and technical services" ranks second with 121. These two industries account for 26% of all businesses in Lamoille County.

"Administrative and waste services" has been the fastest growing industry at 57%, measured by the percent increase in the number of business establishments. Followed by "Wholesale trade" at 55% and "Agriculture, forestry, fishing and hunting" industry at 38%. The greatest percent decline in number of businesses was in the category of "Utilities" which was followed by "Mining" & "Durable Goods manufacturing".

Figure 3.6:



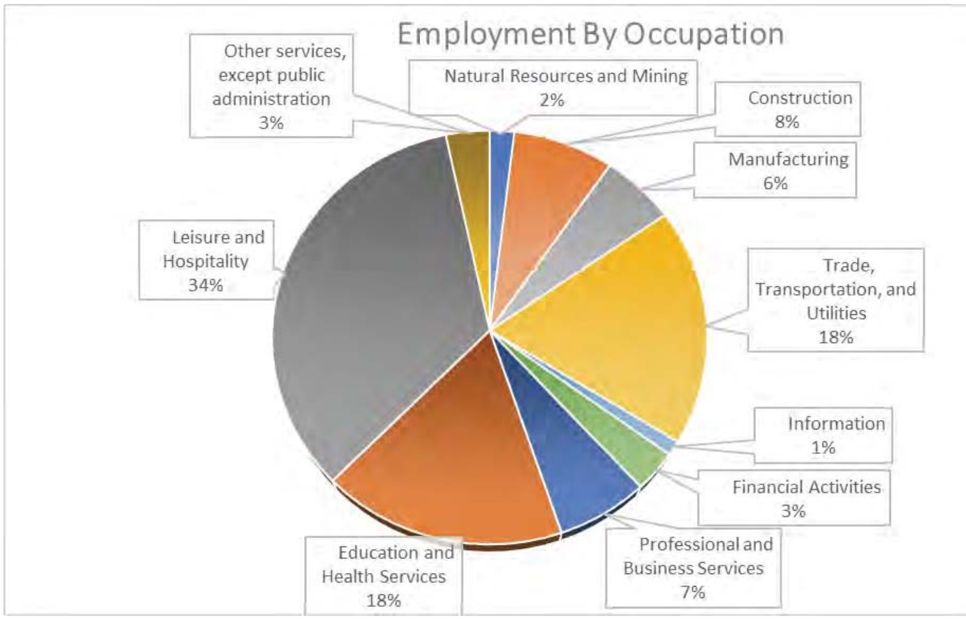
The relatively small number of businesses, however, results in a significantly larger percent decrease when one business closes or relocates. For example, "Utilities" industries will not be considered if the focus is on the industries with at least 10 establishments.

Between 2005 and 2015 the number of businesses ramped down by 2% to a total of 1075 establishments with 1016 being privately owned among them.

3.5.5.2 Employees

This pie chart also breaks down the number of employees by industry. The "Accommodation and food services" Industry provides the greatest number of private jobs in Lamoille County with 3,359 annual average. The number of jobs in the industry grew by 17% in the period from 2005 to 2015. "Health care and social assistance" provides 1,669 jobs, the second highest number. Retail ranks third with 1,495 jobs. "Natural Resources and Mining" super-sector saw the greatest percent increase in number of jobs, growing 189%.

Figure 3.7: Unemployment Rate, seasonally adjusted

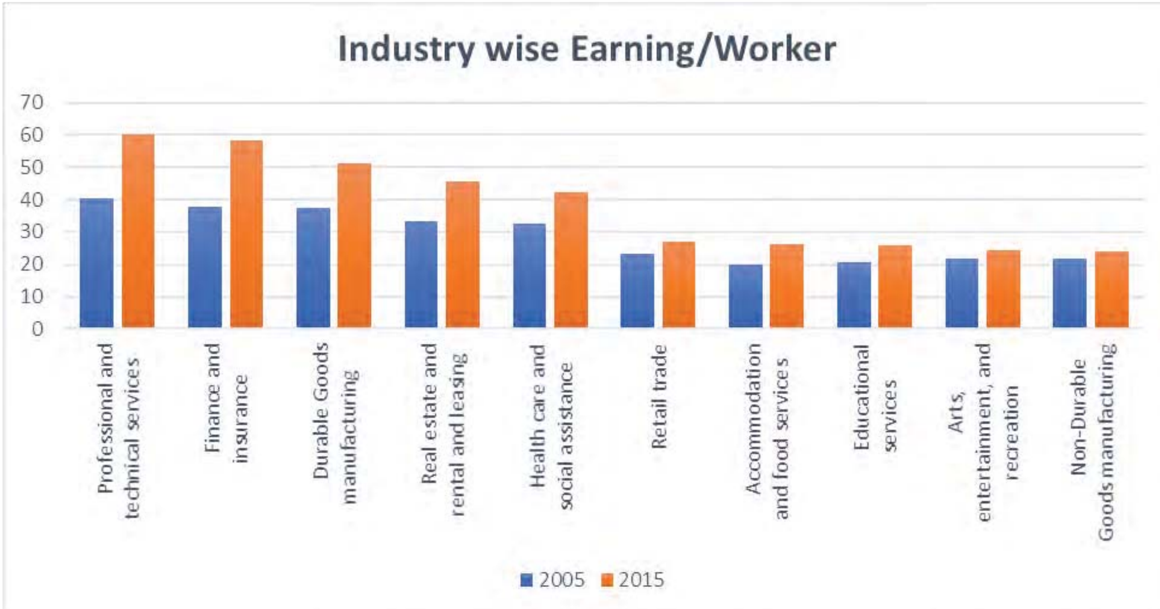


3.5.5.3 Payroll

"Accommodation and food services" has the greatest annual payroll of all industries of $88.6 million. "Health care and social assistance" has the second largest annual payroll with $70.4 million. This has grown 54% between 2005 and 2015.

The only industry to have experienced the decline in payroll despite the changes in number of establishments and employee counts is "Non-Durable Goods manufacturing" observing a fall of 38%.

Figure 3.8:



On the other hand, "Arts, entertainment and recreation" and "Non-durable goods manufacturing" provide the least paying jobs since 2005.

This section shows the comparison of staffing and earnings of the staff within industries in 2015.

Figure 3.9:

4 INDUSTRIAL CLUSTER AND COMPETITIVITY ANALYSIS

4.1 Shift Share Analysis

A shift-share analysis is one method of accounting for a region's competitiveness by determining how much job growth can be attributed to unique local factors rather than national or industrial trends. These factors may include advantages such as access to natural resources, a concentration of entrepreneurial skills, favorable local labor situations, or local infrastructure. We use this analysis to help identify if Johnson has any unique local conditions, assets, or traits that help attract certain industries more than other regions of Vermont. If it does, then economic development strategies should be engaged to retain and strengthen these locally unique factors. Shift share is not the only tool we use to determine local uniqueness. This information is combined with interviews with key stakeholders and employers, site visits, and market analysis to create a more complete picture than what a desktop shift-share analysis can provide alone.

Shift-share analysis identifies which industries in the Morrisville-Waterbury LMA has a competitive advantage but does not identify the reason or reasons for that advantage. In this analysis, we examined industry employment trends between 2005 and 2015. As shown in Table 4.1, a shift-share analysis divides employment change (i.e., change in the number of jobs) into three contributing factors. These are described in detail below:

National Growth Share (NGS) NGS looks at growth (in this case employment) that is attributable to growth in the national economy. This represents the number of jobs that would have been created locally if local industries were growing as the same rate as the national rate for total employment. NGS answers "If the county industry grew at the national growth rate, what would be the result?" NGS = Local Industry Employment * National Growth Rate for Total Employment

Industrial Mix Share (IMS) measures the growth that is attributable to the mix of faster or slower than average growing industries. This represents the number of jobs that would have been created locally if each local industry was growing at the same rate as that industry grew nationally. IMS answers the question "How much growth can be attributed to the region's mix of industries?" IMS = Local industry employment * (national industry growth rate - national average growth rate)

Local Share (LS) LS is the growth that is attributable to the competitive nature of the local industries. It identifies the county's leading and lagging industries. The LMA has a competitive advantage in a particular industry if its employment in that industry is growing faster than the industry's employment nationally, that is, it is the growth that cannot be explained by national trends in that industry or the economy as a whole. LS answers the question "How many jobs are created as a result of the county's competitiveness"? LS = local industry employment * (local industry growth rate - national industry growth rate)

The resulting analysis provides an overall picture of the economy through the lens of 2-digit NAICS sectors. This is a blurry view of the economy since 2-digit NAICS sectors covers a lot of diverse types of employment. For example, non-durable manufacturing includes manufacturing of food, clothing, textiles, plastics, and chemicals to name a few. It is easy to see how some of those sub-sectors might be stronger in Vermont or Lamoille County than others. We start with a shift share analysis to get a large overall picture of the economy. We will then use Location Quotient Analysis to drill down into each sector. Table 4.1 shows which of sectors (in the orange cells) show positive local competitivity through the shift share analysis.

Construction supersector: the overall sector is growth in Johnson's LMA however, due to confidentiality of private data, we cannot see which construction sub-sectors are doing well. Based on local interviews, the second home market provides a majority of the support to local trades and retail building suppliers. IMS is also strong in this sector.

Durable Goods manufacturing: this is a sector that has seen a growing local share of employment more than the state share however the IMS of this industry has dipped resulting in a mixed signal.

Retail trade: is the only sub-sector within the Trade, Transportation, and Utilities supersector that has seen a growing local share but lesser than the state share and when industry share has dipped. The IMS in retail is also weak providing another mixed signal.

Information supersector: this supersector is showing strength but the data is concealed so that we cannot see from this analysis which sub sectors are doing well. This supersector includes publishing, broadcasting, internet and telecommunication sectors. Additional analysis is performed to reveal any opportunities here.

Professional and Business Services supersector: This supersector shows strength in both the LS and IMS indicators. The subsectors that are strong is not known through this level of analysis. Additional research is needed. We can see that the Professional and Technical Services subsector is weak and losing shares compared to the national average. The positive gains shown must be from other subsectors such as administrative support and management but neither of these provide enough data to protect confidentiality of the individual businesses.

Health Care and Social Assistance subsector: this is the strongest subsector within the LMA. It shows strength in both IMS and LS indicators.

Accommodations and Food Services subsector: This is the second strongest growth sector in the LMA. This is primarily due to the tourism industry of Lamoille County.

Table 4.1: Shift Share Analysis for LMA

	Morristown-Waterbury (LMA)			Vermont (State)			SSA		
	2005 Total Emp(a)	2010 Total Emp(b)	2015 Total Emp(c)	2005 Total Emp(d)	2010 Total Emp(e)	2015 Total Emp(f)	NGS	IMS	LS
Total Covered - all ownerships	14,570	15,616	15,640	296,468	293,088	307,096	X	X	X
Private ownership	11,010	11,718	13,212	249,122	240,265	254,137	676.5534	0	817.4466
Goods Producing domain	2,212	2,143	2,372	64,803	47,438	49,940	123.7288	-10.7015	115.9728
Natural Resources and Mining supersector	92	176	214	3,144	3,087	3,831	10.16158	32.2563	-4.41788
Agriculture, forestry, fishing and hunting	(c)	(c)	(c)	2,206	2,492	3,185	(c)	(c)	(c)
Mining	(c)	(c)	(c)	938	595	646	(c)	(c)	(c)
Construction supersector	836	811	974	14,941	13,548	15,177	**46.8241**	**50.68985**	**65.48605**
Manufacturing supersector	1,284	1,157	1,184	46,719	30,803	30,932	66.80084	-61.9554	22.1546
Durable Goods manufacturing	674	469	514	34,031	21,755	19,680	**27.0783**	**-71.8117**	**89.73339**
Non-Durable Goods manufacturing	610	688	670	12,687	9,048	11,252	39.72254	127.8672	-185.59
Service Providing domain	8,798	9,575	10,840	184,319	192,826	204,197	552.8246	11.81568	700.3597
Trade, Transportation, and Utilities supersector	2,618	2,843	2,708	58,109	55,725	55,304	164.1442	-185.623	-113.521
Wholesale trade	372	565	276	9,946	9,518	9,298	32.62098	-45.6804	-275.941

Retail trade	2,000	2,015	2,094	39,676	37,939	37,894	**116.3385**	**-118.729**	**81.39002**
Transportation and warehousing	(c)	(c)	182	6,794	6,467	6,564	(c)	(c)	(c)
Utilities	(c)	(c)	157	1,692	1,801	1,548	(c)	(c)	(c)
Information supersector	141	149	157	6,854	5,349	4,630	**8.602701**	**-28.6309**	**28.02823**
Financial Activities supersector	312	457	366	12,664	11,882	11,708	26.38547	-33.0778	-84.3077
Finance and insurance	224	335	232	9,615	8,934	8,746	19.34164	-26.3911	-95.9505
Real estate and rental and leasing	88	122	135	3,049	2,948	2,962	**7.043822**	**-6.46445**	**12.42062**
Professional and Business Services supersector	651	924	1,518	20,842	23,197	27,421	**53.34829**	**114.9052**	**425.7465**
Professional and technical services	397	553	546	12,282	13,532	14,214	31.92815	-4.05747	-34.8707
Management of companies and enterprises	-	(c)	(c)	301	933	2,218	(c)	(c)	(c)
Administrative and waste services	254	(c)	(c)	8,259	8,732	10,989	(c)	(c)	(c)
Education and Health Services supersector	1,669	1,869	2,338	42,823	55,756	60,107	107.9091	37.94106	323.1499
Educational services	212	232	236	8,640	9,263	10,017	13.39481	5.489785	-14.8846
Health care and social assistance	1,457	1,636	2,102	34,183	46,493	50,089	94.4565	32.07988	339.4636

Leisure and Hospitality supersector	2,919	2,879	3,328	33,009	32,369	36,072	**166.2227**	**163.1337**	**119.6436**
Arts, entertainment, and recreation	123	263	218	3,308	3,809	4,134	15.18463	7.255639	-67.4403
Accommodation and food services	2,796	2,615	3,110	29,701	28,559	31,938	**150.9803**	**158.4173**	**185.6024**
Other services, except public administration supersector	488	455	424	10,018	8,549	8,955	26.26999	-4.66162	-52.6084
Unspecified industry supersector	-	-	-	-	-	-	(c)	(c)	(c)
Federal Government	126	107	86	6,064	6,783	6,768			
State government	1,968	2,176	696	14,661	15,919	16,444			
Local government	1,466	1,615	1,646	26,620	30,122	29,747			

c = concealed data due to limited sample size

4.2 Location Quotient Analysis

Location quotient analysis is used to dig deeper into each sector. A location quotient analysis is used, in combination with a shift-share analysis and other primary data analysis, to help shed some light on the economic sectors that are a best fit for the Town of Johnson. A location quotient analysis is performed to determine whether an industry is basic or non-basic in Lamoille County. Basic industries are Lamoille County's "economic base." It can be thought of as the economic foundation of the county upon which other industries and individual businesses are built. It is important to understand if Johnson has any building blocks of the county's economic foundation within its borders, or if it has the potential to attract basic industries. Location quotient is a measure of the county's share of local employment in an industry compared to the state share. It does not compared change over time between different geographies like shift share, it is a static ratio that compares the LMA to the State. The state share is considered the level required to meet local demand. When the share of employment in an industry is greater than that of Vermont State (i.e., a location quotient greater than 1), then anything above that state share is considered surplus, which does not provide local need. This is generally good news for a local economy since it means that it exports its surplus products, and subsequently imports currency.

While shift share analysis identifies the industries that benefit from unique attributes of the local economy, a location quotient analysis identifies the industries that form the economic base of the local economy. Economic development strategies need to retain and recruit these industries to build a sustainable economy that leverages its unique assets to stay competitive. This information can be used, in combination with public opinion, market analysis, natural resource constraints, and other information to help narrow down the list of potential businesses that will be successful in the Railroad Street study area.

Table 4.2 shows the results of the LQA. The cells colored in green on the far-right column are those industries that have a location quotient higher than 1. There are 17 subsectors in the LMA with a positive location quotient (LQ) and are briefly described below. More detailed interpretation and their applicability to Johnson is addressed in the next chapter:

1) Crop Production: This sector has the highest LQ of all 17 subsectors and is showing growth over time.

2, 3, 4) Construction, Construction of Buildings and Specialty Trades: All indications show that this is a result of the strong second home market in the LMA with Stowe and Cambridge leading this sector.

5) Miscellaneous Manufacturing: This sector is including a wide range of products that cannot readily be classified in specific NAICS subsectors. Processes used by these establishments vary significantly, both among and within industries and therefore difficult to classify. For example, the processes to make golf ball and tennis balls differ significantly from each other even though they are made by the same company. With an LQ of 3.0, this sector is very strong in the LMA and needs to be identified further. The growth there is likely a result of Concept2 and MSI in Morrisville.

6) Food manufacturing: The LQ is positive but getting weaker over time indicating that other regions are gaining share compared to this LMA. With crop production still strong and growing, food production and manufacturing in this LMA is not going away soon.

7) Beverage and Tobacco manufacturing: There is no tobacco manufacturing in the LMA so this strong LQ is a result of the growth in craft beer, spirits, and wine in the LMA.

8) Electronic markets and agents and brokers: This industry is showing strength and growth in the LMA. It is a subsector in the Wholesale Trade industry. Electronic Markets and Agents and Brokers subsector arrange for the sale of goods owned by others, generally on a fee or commission basis. They act on behalf of the buyers and sellers of goods. This subsector contains agents and brokers as well as business to business electronic markets that facilitate wholesale trade.

9, 10,11, and 12) Retail trade of Food and Beverage, Gasoline, Sporting Goods, books music, and Non-store retailers: are all showing a positive LQ and nearly all of them are growing from 5 years ago except for food and beverage. While these subsectors are showing strength, their wages tend to be low and exports very little product.

13) Transit and ground passenger transportation: This sector has shown steady and slightly positive growth over the last 10 years.

14) Utilities: Has gone from 0 to 1.9 in 5 years. There are 4 municipally-owned utility companies in the LMA. Since utilities serve businesses and households, their growth is a reflection of growth in other sectors.

15) Other Schools and Institutions: The sector represents private institutions and specialty schools. The sector shows strength in the LMA even when growth throughout the state is occurring which is positive news.

16) Accommodation and food services: Taken together, these two sectors balance out to a slight net positive. However, accommodations alone is much stronger. This reflects the demand created by the tourists in the mountain resorts.

17) Hotels and motels, except casino hotel: This sector includes all hotels and motels in the LMA including the condos and timeshares located at the ski areas. It is the second strongest sector in the LMA and is clearly a reflection of the tourist industry.

Table 4.2: Location Quotient

NAICS Code	NAICS Industry	LMA			Vermont			LQ		
		2000	2010	2015	2000	2010	2015	2000	2010	2015
--	Total Covered - all ownerships	14,570	15,616	15,640	296,468	293,088	307,096	X	X	X
--	Private ownership	11,010	11,718	13,212	249,122	240,265	254,137	0.899277	0.9153585	1.0207939
--	Goods Producing domain	2,212	2,143	2,372	64,803	47,438	49,940	0.6945576	0.8478598	0.9326175
--	Natural Resources and Mining supersector	92	176	214	3,144	3,087	3,831	0.5954202	1.0700505	1.0968293
11	Agriculture, forestry, fishing and hunting	(c)	(c)	(c)	2,206	2,492	3,185	0	0	0
111	Crop production	28	58	145	653	541	843	0.8724954	2.0121436	3.3773638
112	Animal production and aquaculture	26	37	44	1,017	1,405	1,807	0.5202004	0.4942579	0.4781145
113	Forestry and logging	24	15	12	(c)	(c)	198	0	0	1.1900178
1131	Timber tract operations				(c)	(c)	(c)	0	0	0
1132	Forest nursery and gathering forest products					(c)		0	0	0
1133	Logging	24	15	12	185	156	(c)	2.6397195	1.8046579	0
114	Fishing, hunting and trapping				(c)	(c)		0	0	0
115	Agriculture and forestry support activities	(c)	(c)	(c)	346	376	337	0	0	0
21	Mining	(c)	(c)	(c)	938	595	646	0	0	0
212	Mining, except oil and gas	(c)	(c)	(c)	(c)	(c)	(c)	0	0	0
213	Support activities for mining				(c)	(c)	(c)	0	0	0
--	Construction supersector	836	811	974	14,941	13,548	15,177	1.1385311	1.1235021	1.2601157
23	Construction	836	811	974	14,941	13,548	15,177	1.1385311	1.1235021	1.2601157
236	Construction of buildings	271	200	275	4,216	3,507	4,029	1.3079374	1.0703418	1.3402099
237	Heavy and civil engineering construction	174	99	73	2,110	1,740	1,580	1.6779734	1.0678597	0.9072003
238	Specialty trade contractors	390	512	627	8,614	8,301	9,567	0.9212511	1.1576247	1.2868537
--	Manufacturing supersector	1,284	1,157	1,184	46,719	30,803	30,932	0.5592291	0.7049667	0.7515902
31-33	Manufacturing	1,284	1,157	1,184	46,719	30,803	30,932	0.5592291	0.7049667	0.7515902

--	Durable Goods manufacturing	674	469	514	34,031	21,755	19,680	0.4029985	0.404615	0.5128324
321	Wood product manufacturing	103	32	35	3,007	1,747	1,678	0.6969828	0.3437837	0.4095562
327	Nonmetallic mineral product manufacturing	32	11	(c)	2,114	1,526	1,587	0.3080089	0.1352902	0
331	Primary metal manufacturing				606	154	(c)	0	0	0
332	Fabricated metal product manufacturing	44	76	100	3,121	2,325	2,141	0.2868647	0.6135061	0.9171086
333	Machinery manufacturing	180	156	(c)	4,338	2,742	2,934	0.8443086	1.0677889	0
334	Computer and electronic product manufacturing	(c)			11,128	6,866	5,137	0	0	0
335	Electrical equipment and appliance manufacturing	(c)	(c)	(c)	1,407	1,300	(c)	0	0	0
336	Transportation equipment manufacturing				3,076	1,909	1,954	0	0	0
337	Furniture and related product manufacturing	(c)	(c)	19	3,295	1,393	1,406	0	0	0.2653418
339	Miscellaneous manufacturing	182	154	242	1,939	1,794	1,538	1.9099054	1.6111149	3.0895586
--	Non-Durable Goods manufacturing	610	688	670	12,687	9,048	11,252	0.9783386	1.4271318	1.169183
311	Food manufacturing	400	518	459	4,071	4,123	5,481	1.9992963	2.3580047	1.644335
312	Beverage and tobacco product manufacturing	(c)	(c)	73	244	376	710	0	0	2.0188401
313	Textile mills manufacturing				298	98	159	0	0	0
314	Textile product mills manufacturing	(c)	(c)	(c)	287	61	85	0	0	0
315	Apparel manufacturing	117	(c)	(c)	701	263	327	3.3961441	0	0
316	Leather and allied product manufacturing				(c)	(c)	(c)	0	0	0
322	Paper manufacturing	(c)			1,942	1,080	734	0	0	0
323	Printing and related support activities manufacturing	18	(c)	(c)	2,355	1,117	1,023	0.1555249	0	0
324	Petroleum and coal products manufacturing	(c)	(c)		(c)	(c)	(c)	0	0	0
325	Chemical manufacturing		(c)	19	1,565	764	1,379	0	0	0.270537

326	Plastics and rubber products manufacturing	(c)	(c)	(c)	1,118	1,037	1,233	0	0	0
--	Service Providing domain	8,798	9,575	10,840	184,319	192,826	204,197	0.9712524	0.9319689	1.042359
--	Trade, Transportation, and Utilities supersector	2,618	2,843	2,708	58,109	55,725	55,304	0.9167365	0.9575358	0.9614563
42	Wholesale trade	372	565	276	9,946	9,518	9,298	0.7610492	1.1141175	0.5828502
423	Merchant wholesalers, durable goods	(c)	112	100	4,942	4,200	3,784	0	0.5004918	0.5189031
424	Merchant wholesalers, nondurable goods	297	421	121	4,920	4,873	4,825	1.2283146	1.6214887	0.4924084
425	Electronic markets and agents and brokers	(c)	31	56	85	445	688	0	1.3074645	1.5982216
44-45	Retail trade	2,000	2,015	2,094	39,676	37,939	37,894	1.0257001	0.9968215	1.0850347
441	Motor vehicle and parts dealers	144	120	162	4,743	4,538	5,085	0.6177712	0.4963008	0.6255492
442	Furniture and home furnishings stores	61	32	(c)	1,106	944	935	1.1222587	0.6362184	0
443	Electronics and appliance stores	123	10	(c)	884	884	738	2.8312037	0.2123127	0
444	Building material and garden supply stores	207	207	207	3,126	3,352	3,508	1.3474096	1.1590297	1.1586391
445	Food and beverage stores	557	801	721	9,774	9,795	10,000	1.1595811	1.534816	1.4157047
446	Health and personal care stores	88	84	91	1,872	2,055	2,012	0.9565223	0.7671772	0.8880774
447	Gasoline stations	234	258	266	3,640	3,741	3,842	1.3080753	1.2943754	1.3594451
448	Clothing and clothing accessories stores	71	56	48	2,899	2,833	2,361	0.498343	0.3709964	0.3991928
451	Sporting goods, hobby, book and music stores	137	136	154	2,157	1,936	1,851	1.2923754	1.3184443	1.6336225
452	General merchandise stores	126	111	144	3,625	2,882	3,244	0.7072628	0.7228651	0.8716037
453	Miscellaneous store retailers	122	95	85	3,132	2,332	2,087	0.7926042	0.7645806	0.7997125
454	Nonstore retailers	132	107	171	2,719	2,646	2,230	0.9878318	0.7589657	1.5056661
48-49	Transportation and warehousing	(c)	(c)	182	6,794	6,467	6,564	0	0	0.5444277
481	Air transportation				223	133	98	0	0	0
483	Water transportation				(c)	(c)	(c)	0	0	0
484	Truck transportation	43	32	63	2,760	2,337	2,184	0.3170134	0.2569919	0.5664027
485	Transit and ground passenger transportation	85	89	91	1,259	1,427	1,290	1.3737619	1.1705616	1.3851254

486	Pipeline transportation				(c)	(c)	(c)	0	0	0
487	Scenic and sightseeing transportation	(c)	(c)	(c)	62	54	39	0	0	0
488	Support activities for transportation	(c)	(c)	11	438	512	459	0	0	0.4705626
491	Postal service					16	22	0	0	0
492	Couriers and messengers	(c)			1,184	1,024	1,095	0	0	0
493	Warehousing and storage	(c)	24	(c)	726	829	1,279	0	0.5433566	0
22	Utilities	(c)	(c)	157	1,692	1,801	1,548	0	0	1.9914349
221	Utilities	(c)	(c)	157	1,692	1,801	1,548	0	0	1.9914349
--	Information supersector	141	149	157	6,854	5,349	4,630	0.4185943	0.5228076	0.6658188
51	Information	141	149	157	6,854	5,349	4,630	0.4185943	0.5228076	0.6658188
511	Publishing industries, except Internet	53	70	54	2,700	1,783	1,774	0.3994205	0.736843	0.5976922
512	Motion picture and sound recording industries	18	12	(c)	534	430	328	0.6858822	0.5237705	0
515	Broadcasting, except Internet	30	(c)	(c)	784	665	699	0.7786163	0	0
516	Internet publishing and broadcasting				10			0	0	0
517	Telecommunications	(c)	17	(c)	1,808	1,483	1,152	0	0.2151474	0
518	ISPs, search portals, and data processing	20	(c)	(c)	788	555	213	0.5164426	0	0
519	Other information services	(c)	20	19	230	433	463	0	0.8669027	0.805768
--	Financial Activities supersector	312	457	366	12,664	11,882	11,708	0.5013049	0.7218632	0.6138126
52	Finance and insurance	224	335	232	9,615	8,934	8,746	0.4740422	0.7037641	0.5208539
522	Credit intermediation and related activities	165	178	181	4,777	4,487	4,274	0.7028246	0.7445471	0.8315368
523	Securities, commodity contracts, investments	(c)	10	10	781	808	772	0	0.2322827	0.2543432
524	Insurance carriers and related activities	53	147	40	3,976	3,589	3,686	0.2712363	0.768727	0.2130797
525	Funds, trusts, and other financial vehicles	(c)			81	50	14	0	0	0
53	Real estate and rental and leasing	88	122	135	3,049	2,948	2,962	0.5872777	0.776713	0.8949239
531	Real estate	67	(c)	(c)	1,740	2,045	2,168	0.7835087	0	0
532	Rental and leasing services	21	(c)	(c)	1,262	889	778	0.3385932	0	0

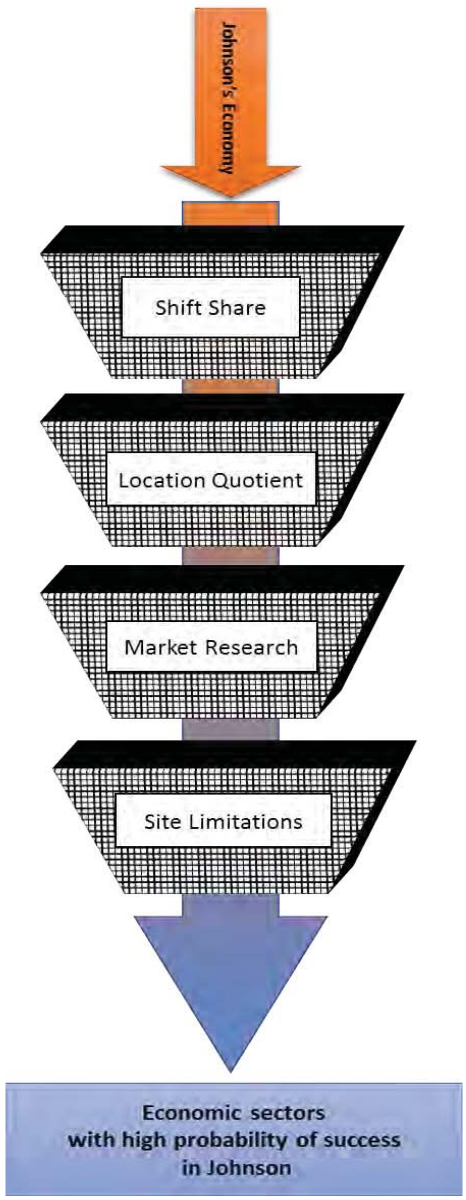
533	Lessors of nonfinancial intangible assets				46	14	16	0	0	0
--	Professional and Business Services supersector	651	924	1,518	20,842	23,197	27,421	0.6355648	0.7475984	1.0869909
54	Professional and technical services	397	553	546	12,282	13,532	14,214	0.6577179	0.766993	0.7542473
541	Professional and technical services	397	553	546	12,282	13,532	14,214	0.6577179	0.766993	0.7542473
55	Management of companies and enterprises		(c)	(c)	301	933	2,218	0	0	0
551	Management of companies and enterprises		(c)	(c)	301	933	2,218	0	0	0
56	Administrative and waste services	254	(c)	(c)	8,259	8,732	10,989	0.6257841	0	0
561	Administrative and support services	193	317	421	7,455	7,851	9,984	0.5267784	0.7578138	0.8279706
562	Waste management and remediation services	60	(c)	(c)	804	880	1,005	1.5184954	0	0
--	Education and Health Services supersector	1,669	1,869	2,338	42,823	55,756	60,107	0.7930444	0.629138	0.7637599
61	Educational services	212	232	236	8,640	9,263	10,017	0.4992757	0.4700722	0.4626065
611	Educational services	212	232	236	8,640	9,263	10,017	0.4992757	0.4700722	0.4626065
6111	Elementary and secondary schools	88	104	81	2,460	2,483	2,503	0.7278901	0.7861128	0.635421
6112	Junior colleges	(c)			681	(c)		0	0	0
6113	Colleges and universities		(c)	(c)	3,873	4,530	5,213	0	0	0
6114	Business, computer and management training	(c)	(c)	(c)	144	(c)	285	0	0	0
6115	Technical and trade schools				454	251	222	0	0	0
6116	Other schools and instruction	84	73	84	851	1,196	1,372	2.0084822	1.1455655	1.2021609
6117	Educational support services	(c)	(c)	16	178	353	423	0	0	0.7427062
62	Health care and social assistance	1,457	1,636	2,102	34,183	46,493	50,089	0.8672966	0.6604257	0.824001
621	Ambulatory health care services	529	553	794	13,653	15,534	16,707	0.7883986	0.668144	0.9331671
622	Hospitals	(c)	(c)	(c)	9,654	12,560	13,487	0	0	0
623	Nursing and residential care facilities	316	(c)	(c)	6,155	7,080	7,416	1.0446656	0	0
624	Social assistance	(c)	417	565	4,720	11,319	12,479	0	0.6914428	0.8890088

--	Leisure and Hospitality supersector	2,919	2,879	3,328	33,009	32,369	36,072	1.799368	1.6693239	1.8115508
71	Arts, entertainment, and recreation	123	263	218	3,308	3,809	4,134	0.7565853	1.2959045	1.0354364
711	Performing arts and spectator sports	37	(c)	(c)	564	657	814	1.3348759	0	0
712	Museums, historical sites, zoos, and parks		(c)	(c)	364	461	491	0	0	0
713	Amusements, gambling, and recreation	86	165	110	2,380	2,691	2,829	0.735258	1.1507964	0.7634791
72	Accommodation and food services	2,796	2,615	3,110	29,701	28,559	31,938	1.9155098	1.7185293	1.9120097
721	Accommodation	1,701	1,702	1,927	11,752	10,621	11,964	2.9451729	3.007616	3.1625887
7211	Traveler accommodation	1,624	(c)	(c)	11,261	10,240	11,456	2.9344542	0	0
72111	Hotels and motels, except casino hotels	1,515	1,643	1,794	10,202	9,631	10,806	3.0216599	3.2018016	3.2598295
72119	Other traveler accommodation	109	(c)	(c)	1,060	609	649	2.092372	0	0
7212	RV parks and recreational camps	77	(c)	(c)	469	365	478	3.3406898	0	0
7213	Rooming and boarding houses				22	15	30	0	0	0
722	Food services and drinking places	1,095	913	1,183	17,949	17,939	19,974	1.241344	0.9552142	1.1629395
--	Other services, except public administration supersector	488	455	424	10,018	8,549	8,955	0.9911904	0.9989053	0.929689
81	Other services, except public administration	488	455	424	10,018	8,549	8,955	0.9911904	0.9989053	0.929689
811	Repair and maintenance	164	142	142	2,932	2,442	2,780	1.1381465	1.0913673	1.0029539
812	Personal and laundry services	84	78	96	2,180	1,965	2,068	0.7840451	0.7450069	0.911503
813	Membership associations and organizations	163	173	148	3,001	3,272	3,361	1.1051975	0.9923413	0.8646306
814	Private households	77	63	37	1,906	870	746	0.822027	1.3590941	0.9738685

5 COMPETITION AND LOCATION ANALYSIS

This section combines the information gathered through economic analysis (Shift Share and Location Quotient), market research, personal interviews and site analysis to review which sectors would be most successful in the Study Area. These can be thought of as a 4-part filtering process through which Johnson's economy is run. The sectors that are not removed due to economic conditions, market realities or location constraints are considered to have the highest probability of success compared to all other sectors in the economy. After determining which sectors will be likely successful, a more specific plan to recruit or develop businesses in these sectors should be created. This activity is outside the scope of this project but should be considered by the Town and Village.

Figure 5.1:



5.1 *Sector 111, Crop Production:*

Crop production is the strongest economic sector in the LMA. This activity is occurring primarily outside of Johnson Town but within the greater LMA. It is a represented by many farms across the LMA such as Pete's Greens and Boyden Farms to name a few examples. It is also made up of a wide network of small farmers that are providing raw materials for value added agricultural products. For example, soy bean farmers selling to Vermont Soy in Hardwick or the numerous hay and corn growers selling to local milk, meat, and cheese producers. The strength and viability of this sector comes from the wide and diverse network of growers. The study area would benefit from this sector. There is currently no evidence that this sector is represented in the study area. Value added food manufacturing, farmers markets, specialty food storage, food distribution, and food packaging are all business activities that would do well in the study area.

5.2 Sector 236 and 238, Construction of Buildings and Specialty Construction:

These two sectors are supported almost entirely by the second home market created by the tourist industry. The sectors are already represented in the study area through Parker and Stearns and the now shuttered, Manchester Mill. Expanding on this sector is difficult. Manchester Mill closed in the study area even though this sector is growing. The Mill's difficulty came from macro-economic forces from global markets, the strength and proximity of Canadian lumber, the rules of NAFTA and similar external forces. Parker and Sterns is strictly retail. They purchase building materials from wholesalers and sell to the end user. They perform very little value-added activity (outside of retail) with the exception of manufacturing custom trusses. Parker and Stearns have been in business for over 125 years. They have experimented with value added products to expand their business in the past and have since cut back due to competitive forces. If they thought they would benefit from further expansion they would most likely be doing so now. Therefore, they reflect the true market and additional market research is not needed to determine the position in this sector. The business is an important component of the local economy and should be supported to the best of the Town's ability.

5.3 339 Miscellaneous Manufacturing:

Miscellaneous manufacturing is strong in the LMA. It is difficult to identify exactly which businesses are creating this growth because of the ambiguous nature of the sector. There are many diverse types of manufacturing that cannot be easily categorized and therefore are grouped together in miscellaneous manufacturing. In the LMA the likely businesses are Concept2 rowing and their contracted assemblers, MSI, both from Morrisville. MSI is a contract assembler from multiple clients and provide logistic support for businesses. They also own an inventory of leasable manufacturing space. It is difficult to envision these two growing businesses expanding into Johnson. There is no real attraction in Johnson that would entice them to move. Perhaps, MSI can be helpful in finding a tenant for the Manchester Mill, but already have 7 vacant buildings as of this writing so the tenant would be seeking a highly unique space.

5.4 311 Food Based Manufacturing

This sector has strong growth potential in the LMA and in Vermont. The sector has growth opportunities that stem from creative new food products, food storage and packaging technology, and strong national level demand for healthy and organic foods. This sectors location quotient in the LMA rose to a peak of 2.0 which means it produces twice as much as it consumes and exports the rest. Since 2010 the sector tapered back some but this can indicate that other LMAs are growing this sector as well. It would behoove the LMA to make efforts to maintain its location quotient. Specialty foods, organic food, and locally-sourced low-impact foods are in high demand in Vermont and throughout the country. Vermont has benefitted from its brand as a clean and healthy state and will continue to do so. The sector enjoys strong structural support from Vermont and the LMA would benefit from taking advantage of this support.

5.5 312 Beverage Manufacturing

The sector is rapidly emerging. It has gone from negligible employment to the 4th strongest sector in the LMA. It is producing approximately twice as much as the local market can sustain and exporting the rest. Currently beverage manufacturing in the LMA means craft beer, wines and spirits with Lost Nation Brewery, Boyden Valley Wines, and Smugglers Notch example businesses. Rapidly emerging sectors, like this one, tend to level off. No business rises dramatically over the long term. Planners should help these businesses maintain their market share by understanding the market and keeping ahead of trends. This sector shows strong growth potential in the LMA and can sustain jobs in industrial design, manufacturing, marketing, distribution and warehousing.

5.6 425 Electronic Markets, Agents and Brokers

This sector is comprised of wholesalers on the internet. The businesses in this sector sell goods and services for other producers on a wholesale scale. An example of a business in the LMA classified in this sector is Inntopia. They create reservation software for the travel and tourism industry then sell reservations through a licensing agreement and retain a percentage. Other businesses such as Par Springer Miller also operate in the LMA. These industries need software engineers, marketing specialist, programmers, IT professionals, and similar skills. These skills are not in high concentrations in Johnson. While the LMA does have a percentage of this labor, these companies are starting to look toward Burlington and other urban lifestyle hubs to capture this highly sought-after labor pool. The other challenge Johnson has is telecommunications. The internet and cellular network in not up to the standards demanded by these companies. The study area is not suitable for this sector.

5.7 44-45 Retail, 451 Sporting Goods, 454 Nonstore retailers

While some subsectors of the Retail Supersector are going well in the LMA, there is little opportunity for retail in the study area. No additional retail activity in the study area is recommended.

5.8 6116 Other Schools and Instructions

Laraway School on Route 15 in Johnson is a licensed special education independent school and a coeducational day treatment center serving students, ages 5-22 in grades K-12. Laraway is the most significant business in this sector and they are not just located in the LMA but in the heart of Johnson. They have 140 employees and are growing. Laraway may be the only expanding business in a growth sector located in Johnson. The study area is an excellent location for expanded services that Laraway is considering or currently providing. They provide extracurricular activities, experiential education, adventure based education, recreation activities, and some job training skills. They partner with Johnson State College, whose students design and lead recreation activities. The study area is located on the edge of the Lamoille River, across from Laraway's property. The study area is on the Lamoille Valley Rail Trail and at the Old Mill Park. The recreation opportunities are superb here and may be the site's greatest asset. Laraway is seeking to expand since their space is currently maximized. Expanding across the river, via a pedestrian bridge, to a newly built outdoor recreation and environmental education center where they can provide high quality experiential education is an opportunity that has strong market support and fits within the location well. The outdoor center can also be used by the general public for a fee who can enjoy a climbing wall, gym, and other programable multi-use space for indoor events and activities.

6 HIGHEST AND BEST USE DETERMINATION

The final step in this analysis is to combine all the information gathered above and make the best professional judgement on the highest and best for key parcels in the study area. A highest and best use determination states what land uses are likely to maximize productivity or return on investment given the physical and legal limitations on the land and financial constraints of the market. Highest and best use analyses are usually completed for a single parcel of land. In this case, we have an entire area that includes 58 parcels of land, located primarily along one mile of Railroad Street, from the village Main Street to town owned land, and for a ¼ mile along River Road perpendicular to Railroad Street. This area is described in detail under the existing conditions chapter of this report. The challenges here is that the highest and best use for one parcel will be different than for others. Many parcels are small in the study area except for the former Talc Mill, which is now town-owned land, and the Manchester Mill. Size, neighboring uses, location, existing buildings, and natural constraints will influence the highest and best use. Therefore, the analysis does not identify specific uses for any specific of these parcel, rather, it considers all of them as potential redevelopment opportunities and discusses the best options for the area as a whole.

6.1 Existing Assets:

First, to redevelop the study area it is most important that the town's existing assets are leveraged to their best possible means. No community development project is an island unto itself; they must engage the community to be successful. Three significant assets that the town can leverage are Laraway Youth and Family Services, Johnson State College and the Vermont Studio Center. Each of these assets are large employers and present different opportunities and challenges. The Vermont Studio Center is planning on expanding but is settled on implementing a recently completed strategic plan. This expansion will not occur in the study area. The presence in the town alone still makes them an important partner in several options. Johnson State College has expressed interest in expansion but is in no financial position to do so now. While financially constrained they are still a viable partner in the operations of certain land uses. The size of the college alone creates demand for land uses that would not otherwise be present. Laraway Youth and Family Services has a need and desire to expand. Creating opportunities in the study area for existing assets is a central tenant of any economic development strategy: "*grow existing businesses first*." The options presented below keeps this notion as a foundation. Second, strong and growing businesses in the LMA are also important assets and they are targeted in this analysis. They are indicators of new growth options. Johnson can benefit from recruiting these businesses or attracting similar businesses from further away.

6.2 Highest and Best Options

6.2.1 Food Based Manufacturing

Food based manufacturing is on a longer term positive growth trend in Vermont. The Vermont brand is benefiting from a national surge in demand for heathy, organic, small scale foods. Opportunities in the study area include: value added crop and vegetable products; incubator kitchens; food storage facilities especially cold or frozen storage; meat processing; commercial bakery; maple syrup products; specialty and gourmet food production; and snacks. These products could be produced in a single use facility owned or rented by a single food manufacturer or within a larger multi-use facility such as a rentable commercial kitchen or incubator business building.

Market research and feasibility studies on incubator kitchens in Vermont have been conducted by Crane Associates in the past and a few lessons are learned: first, not all food products being made in the buildings are compatible, so multiple kitchens in the same market area can be supported. Second, there is a high demand for meat processing facilities in Vermont, the shortage of which is caused by USDA regulations. Third, incubator kitchen, by definition, have high turnover rates because both successful and failing businesses will eventually leave (albeit for different reasons).

The opportunities in this sector for the study are strong. Determining the exact type of business, size, market focus, and facility would require more detailed market research beyond the scope of this report. An example of one business model that might work well in the study area is the Mad Rover Food Hub (http://www.madriverfoodhub.com/facility/). This is currently the only USDA meat processing facility in Vermont. They also serve businesses in other markets such as vegetables, specialty food manufacturing and baking. The Facility provides food storage (dry, frozen, and cold) as well as distribution services. The Hub is only 4,000 square feet and the demand in Vermont is not met by this facility alone.

6.2.2 Food Storage

Crop production is the strongest economic sector in the LMA. This activity is occurring primarily outside of Johnson Town but within the greater LMA. This sector demands food storage facilities. Producers across the LMA such as Pete's Greens and Boyden Farms as well as a wide network of small farmers that are providing raw materials for value added agricultural products to food producers. There is currently no evidence that this sector is represented in the study area. Specialty food storage, farmers markets, food distribution, and food packaging are all business activities that would do well in the study area. Food Storage facilities can be an additional component supporting food manufacturing.

6.2.3 Beverage manufacturing

Craft beer, wines and spirits represented by companies like Lost Nation Brewery, Boyden Valley Wines, and Smugglers Notch Distilleries are growing strong in the LMA. The study area can accommodate some of these types of businesses but not all. The author doesn't recommend any retail activity such as a brew pubs or wine bars at this location because it would detract from Main Street. The viability of Johnson's Main Street is fragile. Eating and drinking establishments are the core of downtown activity and serve many community purposes. Johnson is too small and the economy too weak to spread this activity across the town. The study area does extend to Main street and two corner parcels on Main street have potential but they are both occupied with active businesses. The strength of this sector is in manufacturing not retail and the author advises the public to not confuse the two.

The manufacturing of spirits, wine, or beer has strong market support in the study area if a new building was built. The Manchester Mill may or may not be suitable for this activity and no other buildings would work. Additional and more targeted market research is needed to answer this question. The craft beer market is still growing but leveling off, there is strong competition in this market and there is little new or innovative about this product. Any new entrant into the market has a much tougher challenge to gain market share today than 10 years ago (Zero Gravity, Switchback) or even 20 years ago (Long Trail, Otter Creek). So, while the market will remain strong, individual businesses are more at risk. Therefore, the study area should take the lead in this market by moving up the supply chain. It can be the supplier and distributor for the factors of production in beer, spirits, or wine such as the supply, storage and distribution of hops and grains, supplier of equipment parts, and specialized services such as mechanical or industrial design, marketing, and distribution.

Non-alcoholic products should not be forgotten in this analysis. The demand for new healthy soft drinks is rising. Maple Sap soda, kombucha, soy milk, sparkling bitters. flavored waters, sparkling vinegars, and teas are all healthy drinks that are alternatives to highly concentrated sugary drinks. The market for healthy hydration, adult soft drinks, savory, bitter or spicy soft drinks has grown by 67% between 2010 and 2015. Vermont manufactures very little of these types of drinks. Drink companies that leverage the Vermont brand can capitalize in the early growth of this market. Johnson can establish itself as Vermont's leaders in this national market and the study area may be a good location for these products.

6.2.4 Maker Spaces

A makerspace is a collaborative work space inside a production facility owned by the public or private sector. They have multiple objectives including manufacturing items for sale, experimentation, training & learning and collaborating with colleagues. The space can take advantage of an economy of scale of space, tools, infrastructure, utility cots. These spaces can be open to young adults, adults, entrepreneurs, small businesses, or training centers. They make expensive equipment like 3-D printers, laser cutters, and computerized machine tools available to anyone and, more importantly the spaces provide access to people who show you how to use these machines.

Miscellaneous manufacturing a is a strong growth sector in the LMA. This does not necessarily lead to successful maker spaces. However, the fact that this sector is strong indicates that labor skills for manufacturing are present in the area and may indicate a demand for these spaces. The presence of strong entrepreneurial activity is also necessary for the viability of maker spaces.

Makerspaces, also referred to at "fab labs," tech incubators, are dedicated to helping makers, designers, creators, and entrepreneurs bring their vision of a new product to fruition. Their mission is primarily to help convert an idea into a tangible, manufactured item. Large scale expensive machines that have traditionally be the source of new enterprises are becoming accessible to anyone. This results in changes on how and where companies are getting formed. Makerspaces can focus on specific products. Some focus on software design or high-tech industries in general, others can be tailored more toward traditional trades, or the arts, textiles, or even food. A shared use commercial kitchen, like the one in Hardwick is a maker's space for food manufacturing.

A maker space in Johnson may have a few long-term clients. Laraway and Johnson State College may find this space very useful for the services they provide. If so, they would offer long term rent to help stabilize the finances.
Examples of makerspaces are limited in Vermont and include Generator Makerspace in Burlington, the MINT in Rutland, and the Vermont Center for Emerging Technologies in Burlington and Middlebury. The author is unaware of any others. There appears to be no similar spaces such as this for the Northeast Kingdom. Each of these offer different services and different tools and equipment. If Johnson were to establish a maker space, it would require designing a niche in the market that serves a specialized unmet need and to ensure there is at least one long term client.

6.2.5 Johnson Recreation Center

An indoor/outdoor recreation center at the former Talc Mil site has the potential of serving many purposes and leveraging at least two of the major employers in town. This modern and multipurpose recreation should include a climbing wall and full gymnasium, workout and training rooms, and aquatic center with laps pools and open recreation, multipurpose community rooms, dance/yoga studio, teen drop in center, after school programs, and computer lab. The Center is ideally located at the trail head of the Lamoille Valley Rail trail and across from the Old Mill Park. The Recreation Center would have programs to meet all community needs including team and field sports, outdoor sports, hunter education, fly fishing lessons, swimming lessons and aquatic sports, skiing and snow sports, rock climbing and adventure sports. Community programs would be held here such as art lessons, craft workshops, senior programs, after school programs.

The financing of this project would involve multiple elements. Laraway is seeking to expand and they need similar space. They could become a long-term tenant or even own equity of the building in exchange for exclusive use of certain spaces while other spaces would remain shared and open to the public. Johnson State College may also be interested in a long term least on part of the building. There are also state and federal grant to help fund the capital costs of this building. The Johnson Recreation Center would serve an important purpose for the community by improving its public image, and increasing pride and community spirit in an area of the town that needs it most.

6.2.6 Hospitality Training and Culinary Arts Center

The travel and tourism industry in Vermont is one of the largest economic sectors in the state. Tourism supported 31,000 jobs and paid wages and proprietary income of nearly 1 billion dollars in 2015. In this same year, over 850 million dollars was spent in commercial lodging establishments by 1.7 million overnight guests[1]. Considering Vermont' reliance on travel and tourism it is surprising to this author that there is no hospitality training center in the state. The New England Culinary Institute is a highly rated school however, they are having financial troubles and may close soon. In addition, they are a culinary school and not a hospitality management school. Other schools in Vermont, including UVM and Champlain College, offer some course work in this areas and Lyndon State College offer s certification program. In addition, Lyndon and Johnson State Colleges just merged to form Northern Vermont University. Expanding the hospitality training center into a 4-year Bachelor's degree that includes hospitality, hotel management, culinary arts, and hospitality business administration is a natural progression of this sector. The study area can accommodate a new building for this purpose at the Talc Mill site.

6.2.7 Manufacturing of buildings

tiny house movement is a growing industry that includes the manufacturing and sale of small buildings that are used for vacation cabins, garden and tool sheds, garages, farm animal domains, and even full-time residences. While most of their materials would be purchased wholesale, there may be a partnership with Parker and Stearns that would be mutually beneficial. Examples of these businesses include: the Jamaica Cottage Shop. (http://jamaicacottageshop.com); Tiny House Crafters (http://www.tinyhousecrafters.com/); little house by Andre (http://www.littlehousebyandre.com). There were no businesses found on the internet that were in the northeast Kingdom, or in the LMA. Considering the market size of outdoor enthusiasts, outdoor sports, tourism, affordable housing and vacation cabins in the Northeast Kingdom and the high cost of transporting these structures, there is

[1] 2015 benchmark Report; Tourism in Vermont. 2015. Vermont Department of Tourism and Marketing

likely a strong market for these products in northern Vermont which a business in Johnson can supply.

6.2.8 Expansion of the Education Cluster

Specialty Construction Trade School: the study area would support an educational facility for specialty construction trades. Woodworking and timber construction schools are already located in Cambridge and Waitsfield. These are likely too close to support a third similar business. If either of these schools were seeking to expand however, then Johnson would be an excellent location. The high population of young adults, the presence of Johnson State College, the Vermont Art Studio, and Laraway all combine to make a trade school at the study area a competitive location. Outside of wood products, other specialty construction trades schools would also work well at the site and do not have local competition. These include welding and metal works, insulation, masonry, and dry laid stonewalls.

7 Conclusion

7.1 Johnson: The Art Capital of Vermont

The conclusion I am about to write goes beyond summarizing this report. It includes all of what I have learned through over 2 dozen interviews with local businesses owners and community leaders as well as what I observed through multiple site visits. In addition, this is my third contract for economic development or housing market analysis in Johnson and I have completed multiple contracts doing the same for neighboring communities. I use all this past experience and knowledge to draw the following conclusions.

Johnson residents seems to fall into two general categories; those who are proud of Johnson and those who disparage the place. Some individuals even hold both opinions. I found it strange that some resident think that Johnson has a bad reputation or that they believe there is a "perception problem." I have heard this comment too often to ignore it any longer. This is strange to me because this negative perception is not held by people outside of Johnson. Ask any random Vermonter on Main Street Montpelier or Brattleboro or Burlington what they think of Johnson, Vermont and you will hear words like "cool little town", "funky art community," "rural mill town," "little town with a college," "hip little artist town," or the person will say that they don't know much about the town. If there is any negative perception about Johnson it is held by residents (of Johnson and neighboring towns) and not by visitors. This is when a branding exercise can help a town.

Place-based branding is a type of marketing and branding done for communities, municipalities, states and regions designed to promote a positive image, generate visitors and shoppers, attract businesses and to secure a niche market. Vermont does an excellent job of marketing its image and there are countless Vermont-based businesses in travel and tourism, food and agriculture, education and the arts that benefit from this place-based marketing. Johnson needs to do the same for itself. Establishing a Johnson brand will serve multiple objectives including: building community pride; generating agreement among residents on who Johnson is and where it should be gong; targeting key employers and economic sectors for growth; identifying important development projects within town that can implement this image; and securing funding from grants and investors who see Johnson as coherent community with a direction – as therefore a "good bet".

After working in and around Johnson on several projects and as an economic development consultant in Vermont for 15 years, I believe that Johnson should brand itself as the *Art Capital of Vermont*. Johnson already has a great reputation for the arts. The Vermont Studio Center helps tremendously with casting this image. The arts are also present everywhere in town from café walls, to retail shops, to public sculptures, to the music scene and Tuesday night events. Johnson's art is everywhere beneath a thin layer of inhibition. Now it's time for Johnson to embrace the arts sector fully, brag about it to the world, and to leverage the most it can out of this unique and valuable community asset. This brand is not used by any other Vermont community. Johnson is advised to claim it now before any other municipality does. The real estate blog, Motovo, has already found Johnson as one of the top 5 arts towns in Vermont. Other research revealed that no specific town has claimed this title. Cities like Burlington and Montpelier use the arts to help market their cities, and although they are recognized as a destination for the arts, they don't use this brand. Other smaller towns are recognized as arts towns like Weston, Stowe, Putney but this is usually because of one playhouse or museum or similar attraction. They don't have institutions like the Vermont Studio Center which attracts people from around the world or a University that maintains a contestant inflow youth and vibrancy to the point where its average age is in the mid-twenties compared to 41 for the county. Youth, vibrancy, arts, and creativity nestled in the mountains of Vermont is what Johnson has that no one else can claim. It is not universally recognized yet, but that is the work which needs to be done. Johnson *is* the Arts Capital of Vermont, except the world doesn't know it yet.

Staking that claim and branding Johnson as the Arts Capital of Vermont could be a lot of fun. The artist of the community themselves should gather to determine how best to do it. Branding is all about creativity and these assets are already plentiful in town. The work involved coalescing the ideas and coordinating the community conversation. A marketing strategy would follow that identifies a position, media platforms, communications strategies, and actions plans. If Johnson wants to do this they should act soon before other communities stake this claim. It is surprising that one hasn't already. One word of caution: Johnson has many cultures and its history is made up of woolen mills, talc mills, lumber mills and the value-added products from these activities. A branding exercise must be careful not forget its history but instead embrace it. It must be inclusive of all segments of the community, just like all segments of the community must recognize that the economy is changing. There was a time when there was no college in town. Now Johnson is home to a university. Economies in all towns evolve, grow and reshape themselves. The most successful ones retain their culture while charting their new economic future.

7.2 The Study Area

Branding Johnson as the Arts Capital of Vermont is not specific to the study area nor is within the scope of this study. However, the study area is part of the community and I believe that it should be planned within the larger picture of what Johnson needs. The study area has some important parcels of land that can be integrated into my recommendations for Johnson's new brand. The community recreation center, a maker space, a food manufacturing hub, or a buildings trades center all have potential to be merged within Johnson new brand as the arts capital of Vermont.

This report, and the analysis behind it, has identified the sectors of the regional economy that are growing and then filtered through them to identify the types of businesses that would likely be successful in the study area in Johnson. After reviewing the 21-growing economic sector in the region and analyzing them through a four point filtering system, I am recommending nine potation options for businesses in the study area. They include: value added food production (manufacturing); food storage; beverage manufacturing; makerspaces; a community recreation center; hospitality and culinary arts training center; manufacturing of small buildings; and the specialty trades education. Each one of these options require detail market feasibility studies to determine if and how they would be successful. These follow up studies would require determine the correct business model for the endeavor. The studies would need to: identify its target market segment and specialized niche; forecast the businesses' operating revenues and costs; capital expenditures and financing mechanisms. Before these studies begin, the community must be engaged to determine which projects, if any, they would rally behind. It would be very difficult to make any of these endeavors work if the community is not supportive.

Johnson has great untapped opportunities. It has youth and creativity, a strong economic foundation in arts, education and social services. Its history in agriculture, forest products, and manufacturing created a tradition of hardworking individuals. It's location on the Lamoille River and nestled in the mountains with an active Main Street create a unique place. These assets give Johnson unique prospects that can and should be used to create a vibrant local economy.

8 Appendix 1:

Short Term Job Projections Vermont

Table 8.1: Short Term Occupational Projections: 2016 - 2018 Occupations with the most openings

Occupation	2016 base year employment	2018 projected employment	Average total annual openings	Annual growth rate*
1 Cashiers	9,358	9,472	531	0.6%
2 Retail Salespersons	9,767	9,888	426	0.6%
3 Waiters and Waitresses	5,620	5,710	339	0.8%
4 Registered Nurses	6,544	6,801	272	1.9%
5 Combined Food Preparation and Serving Workers, Including Fast Food	5,064	5,201	265	1.3%
6 Carpenters	6,667	6,845	169	1.3%
7 Maids and Housekeeping Cleaners	5,008	5,052	135	0.4%
8 First-Line Supervisors of Retail Sales Workers	4,851	4,899	134	0.5%
9 Stock Clerks and Order Fillers	3,002	3,059	130	0.9%
10 Janitors and Cleaners, Except Maids and Housekeeping Cleaners	5,217	5,283	127	0.6%
11 Landscaping and Groundskeeping Workers	4,633	4,726	127	1.0%
12 Accountants and Auditors	3,451	3,518	124	1.0%
13 Farmers, Ranchers, and Other Agricultural Managers	5,909	5,957	122	0.4%
14 Teacher Assistants	5,299	5,219	122	-0.8%
15 Nursing Assistants	3,693	3,769	116	1.0%
16 Customer Service Representatives	3,441	3,497	108	0.8%
17 Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1,025	1,040	104	0.7%
18 Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,763	2,856	102	1.7%
19 Cooks, Restaurant	2,291	2,368	100	1.7%
20 Dishwashers	1,674	1,674	93	0.0%

21 Bartenders	1,917	1,953	88	0.9%
22 Childcare Workers	2,854	2,854	87	0.0%
23 First-Line Supervisors of Food Preparation and Serving Workers	1,984	2,030	87	1.2%
24 Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	797	813	87	1.0%
25 Automotive Service Technicians and Mechanics	2,631	2,666	86	0.7%
26 Receptionists and Information Clerks	2,462	2,494	86	0.6%
27 Construction Laborers	2,388	2,464	85	1.6%
28 Managers, All Other	3,439	3,466	84	0.4%
29 Maintenance and Repair Workers, General	3,087	3,107	84	0.3%
30 General and Operations Managers	2,845	2,878	83	0.6%
31 Food Preparation Workers	2,137	2,171	83	0.8%
32 Dining Room and Cafeteria Attendants and Bartender Helpers	1,221	1,230	81	0.4%
33 Hotel, Motel, and Resort Desk Clerks	1,302	1,319	80	0.7%
34 Elementary School Teachers, Except Special Education	3,426	3,366	76	-0.9%
35 Hairdressers, Hairstylists, and Cosmetologists	2,214	2,255	76	0.9%
36 Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	5,973	5,996	75	0.2%
37 Teachers and Instructors, All Other	4,042	4,011	74	-0.4%
38 Laborers and Freight, Stock, and Material Movers, Hand	2,218	2,229	74	0.2%
39 Secondary School Teachers, Except Special and Career/Technical Education	2,747	2,699	68	-0.9%
40 Social and Human Service Assistants	2,376	2,424	66	1.0%
41 Heavy and Tractor-Trailer Truck Drivers	4,030	3,979	64	-0.6%
42 Compliance Officers	2,247	2,314	63	1.5%

43 Bookkeeping, Accounting, and Auditing Clerks	6,047	5,980	59	-0.6%
44 Licensed Practical and Licensed Vocational Nurses	1,505	1,532	56	0.9%
45 Farmworkers, Farm, Ranch, and Aquacultural Animals	1,080	1,132	56	2.4%
46 Police and Sheriff's Patrol Officers	1,314	1,340	55	1.0%
47 Coaches and Scouts	1,583	1,585	54	0.1%
48 First-Line Supervisors of Construction Trades and Extraction Workers	1,847	1,912	48	1.7%
49 Light Truck or Delivery Services Drivers	2,432	2,447	47	0.3%
50 Market Research Analysts and Marketing Specialists	1,596	1,658	47	1.9%
Total, All Occupations	368,875	372,445	11,064	0.5%

NOTES AND METHODS:

The 2017 short term occupational projections were based on Vermont historical data from 1990 through 2016, 1st quarter. Time series forecasting methods were used to predict employment movements through 1st quarter, 2018. The results provide a general guide for the direction and relative strength of occupational demand but are not intended to indicate an absolute level of job openings.

Annual openings reflect both job growth and estimated net replacement openings. If employment change is negative, job openings due to growth are zero and total job openings equal net replacements. Net replacement openings are equal to: 1) workers who permanently leave an occupation, less 2) workers who move into a vacated position.

* The average annual growth rate using a compounding formula.

Last updated March, 2017

Table 8.2: Short Term Occupational Projections: 2016 - 2018 Fastest Growing Occupations

Occupation	2016 base year employment	2018 projected employment	Average total annual openings	Total Annual openings
1 Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	132	147	5.5%	12
2 Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	87	94	3.9%	6
3 Physical Therapist Assistants	125	135	3.9%	9
4 Dental Laboratory Technicians	106	114	3.7%	7
5 Helpers--Electricians	115	123	3.4%	6
6 Software Developers, Systems Software	655	700	3.4%	30
7 Helpers--Roofers	44	47	3.4%	2
8 Solar Photovoltaic Installers	104	111	3.3%	6
9 Septic Tank Servicers and Sewer Pipe Cleaners	93	99	3.2%	5
10 Home Health Aides	562	597	3.1%	30
11 Security and Fire Alarm Systems Installers	81	86	3.0%	4
12 Physical Therapists	819	867	2.9%	44
13 Agricultural Equipment Operators	143	151	2.8%	8
14 Food Cooking Machine Operators and Tenders	36	38	2.7%	1
15 Helpers--Carpenters	217	229	2.7%	10
16 Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	656	692	2.7%	31
17 Computer Systems Analysts	448	472	2.6%	17
18 Diagnostic Medical Sonographers	94	99	2.6%	4
19 Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	96	101	2.6%	4
20 Physician Assistants	329	346	2.6%	14
21 Web Developers	748	785	2.4%	26

22 Environmental Engineering Technicians	102	107	2.4%	4
23 Radiation Therapists	41	43	2.4%	2
24 Farmworkers, Farm, Ranch, and Aquacultural Animals	1,080	1,132	2.4%	56
25 Cement Masons and Concrete Finishers	209	219	2.4%	7
26 Cardiovascular Technologists and Technicians	63	66	2.4%	3
27 Painters, Transportation Equipment	42	44	2.4%	2
28 Brickmasons and Blockmasons	190	199	2.3%	6
29 Animal Control Workers	85	89	2.3%	4
30 Urban and Regional Planners	193	202	2.3%	8
31 Clinical, Counseling, and School Psychologists	945	989	2.3%	41
32 Biological Technicians	172	180	2.3%	9
33 Healthcare Support Workers, All Other	215	225	2.3%	9
34 Farmworkers and Laborers, Crop, Nursery, and Greenhouse	603	631	2.3%	30
35 Environmental Engineers	113	118	2.2%	5
36 Health Technologists and Technicians, All Other	162	169	2.1%	6
37 Veterinary Technologists and Technicians	372	388	2.1%	11
38 Parking Lot Attendants	93	97	2.1%	8
39 Sheet Metal Workers	327	341	2.1%	13
40 Building Cleaning Workers, All Other	187	195	2.1%	8
41 Medical and Clinical Laboratory Technologists	236	246	2.1%	11
42 Phlebotomists	190	198	2.1%	8
43 Conservation Scientists	95	99	2.1%	6
44 Environmental Science and Protection Technicians, Including Health	96	100	2.1%	6
45 Respiratory Therapists	218	227	2.0%	8
46 Nurse Midwives	49	51	2.0%	2
47 Court, Municipal, and License Clerks	809	842	2.0%	22

48 Opticians, Dispensing	149	155	2.0%	7
49 Surgical Technologists	149	155	2.0%	4
50 Roofers	405	421	2.0%	14
Total, All Occupations	368,875	372,445	0.5%	11,064

NOTES AND METHODS:

The 2017 short term occupational projections were based on Vermont historical data from 1990 through 2016, 1st quarter. Time series forecasting methods were used to predict employment movements through 1st quarter, 2018. The results provide a general guide for the direction and relative strength of occupational demand but are not intended to indicate an absolute level of job openings.

Annual openings reflect both job growth and estimated net replacement openings. If employment change is negative, job openings due to growth are zero and total job openings equal net replacements. Net replacement openings are equal to: 1) workers who permanently leave an occupation, less 2) workers who move into a vacated position.

Last updated March, 2017

Table 8.3: Vermont Short Term Industry Projections: 2016 – 2018

NAICS Industry	2016 Employment	2018 projected employment	2016 – 2018 change	Average annual growth rate*
Natural Resources and Mining				
111 Crop Production	634	675	41	3.2%
112 Animal Production	1,757	1,849	92	2.6%
113 Forestry and Logging	196	198	2	0.5%
114 Fishing, Hunting and Trapping	n	n	n	n
115 Support Activities for Agriculture and Forestry	294	297	3	0.5%
212 Mining (except Oil and Gas)	547	560	13	1.2%
213 Support Activities for Mining	n	n	n	n
Utilities				
221 Utilities	1,426	1,146	-280	-10.4%
Construction				
236 Construction of Buildings	3,883	4,123	240	3.0%
237 Heavy and Civil Engineering Construction	1,111	1,090	-21	-0.9%
238 Specialty Trade Contractors	8,199	8,652	453	2.7%
Manufacturing				
311 Food Manufacturing	5,331	5,125	-206	-2.0%
312 Beverage and Tobacco Product Manufacturing	741	893	152	9.8%
313 Textile Mills	91	95	4	2.2%
314 Textile Product Mills	83	75	-8	-4.9%
315 Apparel Manufacturing	351	356	5	0.7%
316 Leather and Allied Product Manufacturing	n	n	n	n
321 Wood Product Manufacturing	1,631	1,572	-59	-1.8%
322 Paper Manufacturing	733	711	-22	-1.5%
323 Printing and Related Support Activities	1,026	1,002	-24	-1.2%

324 Petroleum and Coal Products Manufacturing	40	41	1	1.2%
325 Chemical Manufacturing	1,407	1,470	63	2.2%
326 Plastics and Rubber Products Manufacturing	1,203	1,198	-5	-0.2%
327 Nonmetallic Mineral Product Manufacturing	1,384	1,363	-21	-0.8%
331 Primary Metal Manufacturing	n	n	n	n
332 Fabricated Metal Product Manufacturing	1,857	1,816	-41	-1.1%
333 Machinery Manufacturing	2,887	2,825	-62	-1.1%
334 Computer and Electronic Product Manufacturing	4,934	4,404	-530	-5.5%
335 Electrical Equipment, Appliance, and Component Mfg	1,159	1,086	-73	-3.2%
336 Transportation Equipment Manufacturing	1,850	1,669	-181	-5.0%
337 Furniture and Related Product Manufacturing	1,395	1,349	-46	-1.7%
339 Miscellaneous Manufacturing	1,625	1,655	30	0.9%
Wholesale Trade				
423 Merchant Wholesalers, Durable Goods	3,804	3,901	97	1.3%
424 Merchant Wholesalers, Nondurable Goods	4,707	4,720	13	0.1%
425 Wholesale Electronic Mkts, Agents and Brokers	817	1,065	248	14.2%
Retail Trade				
441 Motor Vehicle and Parts Dealers	5,071	5,159	88	0.9%
442 Furniture and Home Furnishings Stores	910	904	-6	-0.3%
443 Electronics and Appliance Stores	721	692	-29	-2.0%
444 Building Material and Garden Supplies Dealers	3,376	3,448	72	1.1%
445 Food and Beverage Stores	9,935	10,081	146	0.7%

446 Health and Personal Care Stores	1,975	1,964	-11	-0.3%
447 Gasoline Stations	3,831	3,940	109	1.4%
448 Clothing and Clothing Accessories Stores	2,267	2,238	-29	-0.6%
451 Sporting Goods, Hobby, Book, and Music Stores	1,932	1,845	-87	-2.3%
452 General Merchandise Stores	3,121	3,305	184	2.9%
453 Miscellaneous Store Retailers	2,015	1,958	-57	-1.4%
454 Nonstore Retailers	2,290	2,251	-39	-0.9%
Transportation & Warehousing				
481 Air Transportation	104	91	-13	-6.5%
482 Rail Transportation	n	n	n	n
483 Water Transportation	n	n	n	n
484 Truck Transportation	2,025	1,873	-152	-3.8%
485 Transit and Ground Passenger Transport	1,367	1,351	-16	-0.6%
487 Scenic and Sightseeing Transportation	17	19	2	5.7%
488 Support Activities for Transportation	472	492	20	2.1%
492 Couriers and Messengers	1,062	1,103	41	1.9%
493 Warehousing and Storage Information	1,305	1,315	10	0.4%
511 Publishing Industries	1,835	1,726	-109	-3.0%
512 Motion Picture and Sound Recording Industries	313	314	1	0.2%
515 Broadcasting (except Internet)	703	704	1	0.1%
517 Telecommunications	1,084	935	-149	-7.1%
518 Data Processing, Hosting and Related Services	221	225	4	0.9%
519 Other Information Services	488	496	8	0.8%
Financial Activities				
522 Credit Intermediation and Related Activities	4,205	4,118	-87	-1.0%

523 Securities, Commodity Contracts, & Other Investments	779	811	32	2.0%
524 Insurance Carriers and Related Activities	3,999	4,034	35	0.4%
531 Real Estate	2,112	2,155	43	1.0%
532 Rental and Leasing Services	712	724	12	0.8%
533 Lessors of Nonfinancial Intangible Assets	n	n	n	n
Professional and Business Services				
541 Professional, Scientific, and Technical Services	14,118	14,594	476	1.7%
551 Management of Companies and Enterprises	2,105	2,181	76	1.8%
561 Administrative and Support Services	9,233	9,664	431	2.3%
562 Waste Management and Remediation Service	1,002	1,029	27	1.3%
Educational and Health Services				
611 Educational Services (includes public education)	39,009	38,334	-675	-0.9%
621 Ambulatory Health Care Services	16,871	17,581	710	2.1%
622 Hospitals (includes state hospital)	13,836	14,342	506	1.8%
623 Nursing and Residential Care Facilities	7,386	7,440	54	0.4%
624 Social Assistance	12,345	12,431	86	0.3%
Leisure and Hospitality				
711 Perf. Arts, Spectator Sports, and Rel. Industries	679	709	30	2.2%
712 Museums, Historical Sites, and Similar Institution	408	420	12	1.5%
713 Amusement, Gambling, and Recreation Industries	2,833	2,966	133	2.3%
721 Accommodation	14,502	14,657	155	0.5%
722 Food Services and Drinking Places	19,571	19,989	418	1.1%
Other Services				
811 Repair and Maintenance	2,775	2,810	35	0.6%

812 Personal and Laundry Services	1,993	2,010	17	0.4%
813 Religious, Grantmaking, Civic, Prof, and Similar Org's	5,492	5,427	-65	-0.6%
814 Private Households	654	599	-55	-4.3%
Government				
Total Federal Government Employment	6,864	7,027	163	1.2%
Federal Government, Excluding Post Office	5,254	5,442	188	1.8%
Postal Service	1,610	1,585	-25	-0.8%
State Government, Excluding Education and Hospitals	9,524	9,584	60	0.3%
Local Government, Excluding Education and Hospitals	9,568	9,954	386	2.0%
Total Wage and Salary Employment**	308,575	311,445	2,870	0.5%
Total Self-Employed and Unpaid Family Workers	60,300	61,000	700	0.6%
Total Employment, All Jobs**	368,875	372,445	3,570	0.5%

NOTES AND METHODS

n Data do not meet disclosure standards
* Growth rates are compound average annual rates
** Total Employment includes suppressed values and does not equal the sum of the disclosed industry line items NAICS refers to the North American Industry Classification System.

Employment shown in 2016 and 2018 is for first quarter, Jan--Mar.

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