Chapter Six: Economic Development

Note: The Northeast Kingdom, along with Franklin, Lamoille, and Grand Isle Counties, comprise the region's local Economic Development District (EDD) – a district approved by the federal Economic Development Administration (EDA). The Economic Development District of Northern Vermont covers the six counties of Caledonia, Essex, Orleans, Lamoille, Franklin, and Grand Isle. The governing board maintains a Comprehensive Economic Development Strategy for the region, which enables communities and organizations within the district to apply for funds from the Economic Development Administration and the Northern Borders Regional Commission, which both regularly support economic development initiatives.

The Comprehensive Economic Development Strategy also guides economic development initiatives in the region's Rural Economic Area Partnership (REAP) Zone, a designation granted to the three counties of the Northeast Kingdom by USDA Rural Development in 2000. One of only four such areas in the U.S., the zone was established to help address longstanding issues of poverty, low incomes, and lack of opportunity. Special set-aside funds are made available for REAP areas by USDA Rural Development. Since its inception, the REAP Zone has attracted hundreds of millions of dollars in investments for housing, community facilities, public infrastructure, and business development. REAP Zone projects are monitored by the Northeast Kingdom Collaborative, a body comprised of representatives from the many regional organizations that serve the three-county area.

Where applicable, this section of NVDA's Regional Plan incorporates information from the Comprehensive Economic Development Strategy:

http://www.nvda.net/files/ComprehensiveEconomicDevelopmentStrategy.2015-2020.pdf

I. OVERVIEW

Employment Characteristics

According to the Vermont Department of Labor, the three counties of the Northeast Kingdom had an estimated labor force of 31,250, which accounts for 9.1% of the state's workforce. The region's covered employment, which includes all private and public ownerships, totals 22,486 and accounts for 7.3% of statewide covered employment. ¹

The regional economy is a diversified mix of manufacturing, health care, tourism, professional services, education, and public-sector employment. Agriculture remains an important component of the region's economy and cultural image.

Table 6.1: Employment in the Northeast Kingdom by Sector							
Largest Industry Sectors by Number of			Largest Industry Sectors by				
Businesses ²	Number	%	Employees ³	Number	%		
			Educational services, and	8,223	27.8%		
			health care and social				
Retail (44-45)	300	14.2%	assistance				
Construction (23)	278	13.2%	Manufacturing	3,444	11.6%		
Professional & Technical Services (54)	166	7.9%	Retail trade	3,368	11.4%		
Healthcare and Social Assistance (62)	159	7.5%	Construction	2,915	9.8%		

¹ Vermont Department of Labor: An Economic-Demographic Profile of Vermont 2017 http://www.vtlmi.info/profile2017.pdf

² Covered employment establishments, Vermont Department of Labor, Economic and Labor Market Information

³ American Community Survey 5-Year Estimates, 2012-2016

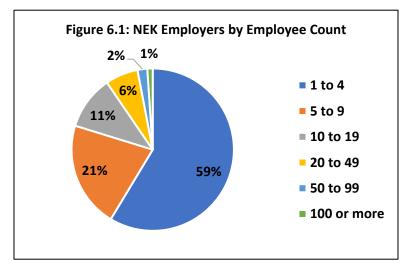
			Arts, entertainment, and	2,218	7.5%
			recreation, and		
Other services, except public			accommodation and food		
administration (81)	156	7.4%	services		
Accommodation & Food Services (72)	138	6.5%	Public administration	1,819	6.1%
			Professional, scientific, and	1,671	5.6%
			management, and		
			administrative and waste		
Manufacturing (31-33)	113	5.4%	management services		
			Agriculture, forestry, fishing	1,501	5.1%
Public Administration (92)	112	5.3%	and hunting, and mining		
			Other services, except public	1,385	4.7%
Educational services (61)	82	3.9%	administration		
			Finance and insurance, and		
			real estate and rental and		
Finance & Insurance (52)	69	3.3%	leasing	1,263	4.3%
			Transportation and		
Real Estate, Rental & Leasing (53)	46	2.2%	warehousing, and utilities	1,044	3.5%
			Wholesale trade	395	1.3%
			Information	382	1.3%

While statewide covered employment grew by 4.2% during the past five years, Caledonia and Essex Counties saw a drop of 2.5% over the same period. By contrast, Orleans County experienced robust growth in employment by 8.5%. Gains are attributed to growth in the food and accommodation sectors (most likely stemming from expansions to Jay Peak), as well as retail development and expansions in existing manufacturing operations such as durables and food production.

While Vermont has seen a significant shift from a "goods-producing" to a "service-producing" economy, this trend is still not as pronounced in the Northeast Kingdom. (The goods-producing industries include natural resource sectors of agriculture, forestry, and mining, as well as construction and manufacturing. Services-producing sectors include transportation and warehousing, utilities and information; finance and insurance; real estate and rental; educational services; health care and social assistance; professional and technical services; management of companies, administrative and waste services; arts, entertainment, and recreation; accommodation and food services; wholesale and retail trade; and government.) Statewide, goods-producing jobs account for 19.3% of all private-sector employment. In the Northeast Kingdom, good-producing jobs account for more than one-quarter of all private-sector employment, in Essex County more than 44%.

The companies listed below provide a representation of the region's traditional manufacturing and natural resource base. These are also some of the region's largest employers.

- Ethan Allen, Essex and Orleans Counties
- EHV Weidmann, Caledonia County
- Columbia Forest Products, Orleans County
- NSA Industries, Caledonia County
- Fairbanks Scales, Caledonia County
- Tivoly USA, Orleans County
- Lyndon Woodworking, Caledonia and Essex Counties
- Vermont Aerospace, Caledonia County

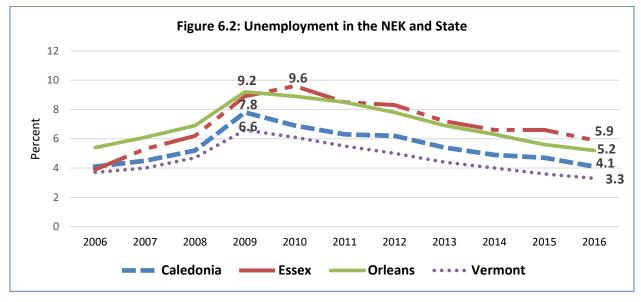


The bulk of employers in the region, however, are very small. According to 2015 data from County Business Patterns, 80% of the region's employers have fewer than 10 employees. (Figure 6.1)

Unemployment

Since its peak in 2009, the state's unemployment rate has been on a downward trend, averaging 3.3% in 2016. Unemployment rates in the region, however, have traditionally outpaced statewide rates. The highest rates of unemployment are in Essex and

Orleans Counties at 5.9% and 5.2% respectively. Caledonia County has the fourth highest rate at 4.1%.



Source: Vermont Department of Labor (*not seasonally adjusted)

Unemployment rates do not reflect a complete picture of the economic conditions of the region, as they only reflect covered employment. In 2015, self-employed workers represented about 19% of the regional workforce, compared to 17% of the state workforce. The U.S. Census Bureau reports on *nonemployers* using tax return information from the Internal Revenue Service. These are largely self-employed individuals operating unincorporated businesses (known as sole proprietorships), which may not be the owner's principal source of income. The data consist of the number of businesses and total receipts by industry. More than half of these non-employers are engaged in construction; retail trade; professional and technical services; forestry, fishing, and agricultural support services; healthcare and social assistance, and other services.

⁴ US. Census Bureau, Nonemployer Statistics

II. REGIONAL ECONOMIC SECTORS

In 2011, NVDA commissioned a study by Economic & Policy Resources to identify and analyze key industry clusters for the Northeast Kingdom using an iterative analysis of sector data, including employment concentration, wage performance and stability, growth and change, and supply chain interrelationships. (See inset for an explanation of rankings.)

Fabricated Metals and Machinery Manufacturing (Mature)

The diversified fabricated metals and machinery manufacturing cluster is in the midst of a recovery after the debilitating Great Recession. Given the significant orientation toward national and international markets, many firms within this cluster are once again showing signs of life and beginning to hire workers and expand production. Workforce training issues are paramount within this cluster.

Precision metal fabrication is deeply rooted in the region's history. Fairbanks Scales, for example, has manufactured platform scales in St. Johnsbury since the mid-1800's. There are numerous other precision metal industries in the Northeast Kingdom, among them NSA Industries in Lyndonville, Vermont Aerospace in St. Johnsbury, and Tivoly USA and North Country Engineering in Derby. EHV Weidmann, in St. Johnsbury, manufactures industrial insulators.

Agribusiness, Food Processing & Technology (Star)

This cluster, comprised of twelve production, processing and distribution segments, had a 2009 critical mass of 75 establishments, employing 654 workers with average wages of \$33,270; this cluster has exhibited strong growth over the business cycle period of 2001-2009. Its measure of economic specialization (called location quotient) has increased over time; meaning its export

orientation continues to strengthen. Overall, the Northeast Kingdom's agribusiness cluster has outperformed its national counterpart over the study period. Finally, this regional cluster has not gone unnoticed—growth and developments in the Northeast Kingdom agribusiness cluster has been cited in national studies and the popular press.

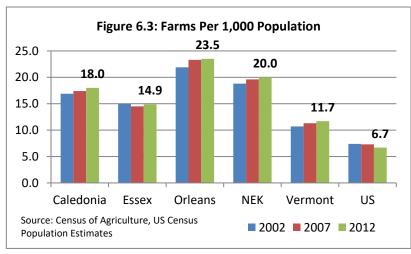
This cluster also represents a tie to the traditional land-based economy, a critical part of the region's traditional landscape that enhances the region's scenic beauty. Approximately 18% of Vermont's farmland is located within the Northeast Kingdom. According to the 2012 Census of

Industry Cluster Rankings

Mature: Traditional mainstay companies having a large number of employees, a high level of concentration (as measured by employment specialization ratio), but in recent years their collective performance is one of stagnation or decline

Opportunity: Potential or emerging, with strong growth in both firms and employment in a number of segments, but overall lack the critical mass or collective concentration. For instance, if a cluster is composed of about 10 interrelated industries, an opportunity or emerging cluster would show firms and employment in only about half to two-thirds of these industries.

Star: These clusters are identified as stars given both their high level of concentration and their solid recent performance. Given the recent "great recession" in the United States, there are few star clusters that have retained their economic luster in any particular geographic region.



Agriculture, there are 1,291 farms in the Northeast Kingdom, which represents an 8.9% increase from 2002. The region has more farms per population than statewide. (Figure 6.3)

Agricultural Trends

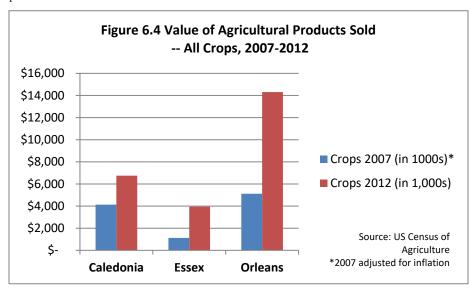
The total market value of all Northeast Kingdom agricultural products (crops and livestock) grew to \$148,204,000 in 2012, an increase of 6.2% since 2007. While the value of livestock sales in the Northeast Kingdom dropped by 4.6% from 2007 to 2012, it still accounted for the majority (83%) of the value of all agricultural sales in the region.

Table 6.2 Market Value of Agricultural Products Sold 2012, 2007*										
	Vermont		Caledonia		Essex		Orleans		Northeast Kingdom	
	2012	2007	2012	2007	2012	2007	2012	2007	2012	2007
Crops (\$1,000)	177,726	109,915	6,748	4,134	3,945	1,123	14,305	5,116	24,998	10,373
Livestock (\$1,000)	598,379	636,101	30,498	30,793	7,706	12,328	85,003	86,070	123,207	129,191
All Agricultural Sales (\$1,000)	776,105	746,016	37,245	34,927	11,651	13,451	99,308	91,186	1,809,889	139,564

*Adjusted to 2012 dollars using Bureau of Labor CPI Inflation Calculator

Orleans leads in agricultural sales in the Northeast Kingdom, as shown on Table 6.4. Although there was no increase in the number of cattle and calves from 2007 to 2012, these animals still far outnumber other livestock in the Northeast Kingdom. However, sharp increases between 2007 and 2012 in the goat and sheep inventories in Orleans County, with a more modest rise in Caledonia County, indicates that livestock is beginning to diversify, and other animal products may account for a larger share of total livestock sales in future years.

The value of crop sales in the Northeast Kingdom saw a dramatic increase of 140% from 2007 to 2012. While crop sales only accounted for 7.4% of Northeast Kingdom total agricultural sales in 2007, it represented 17% in 2012. Crops include nursery and greenhouse crops. This may signal a trend in more local production of food.



Dairy farming is still the main agricultural driver in Orleans County. The county has more than 21,000 dairy cows – fewer than only Addison and Franklin Counties accounting for 15.7% of all dairy cows statewide and \$77.5 million in milk sales. The impact of dairy activity, however, goes well beyond milk sales. A conservative estimate on its direct and induced

impacts statewide is about \$2.2 billion per year.⁵

There has traditionally been little farming in Essex County due to poor agricultural soils and rugged terrain, but a large amount of the county's land area is covered by spruce-fir forest that is harvested commercially. While a significant amount of forested lands has been converted into conservation use, some large parcels have been developed for increased maple production. The Sweet Tree 1 project includes a maple processing facility in Island Pond (in the former Ethan Allen plant), a large commercial sugar house in Avery's Gore, and thousands of acres of sugarbush in northern Essex County. Similarly, the Island Pond Maple Factory, a bulk maple processing company located in the former Island Pond Woodworkers facility has adaptively re-used an existing building and employs local residents.

Forest and Wood Products (Mature)

This cluster includes sectors such as wood products manufacturing, paper manufacturing, and furniture products manufacturing. The forest industry is an intricate part of the region's economic and social identity. Essex County's large percentage of goods-producing industries is largely due to the presence of the Ethan Allen Furniture processing plant in Beecher Falls. Ethan Allen has its primary production facility in the village of Orleans. The company has remained stable over recent years as it transitioned to special order manufacturing. Lyndon Woodworking, Appalachian Engineered Flooring, and Newport Furniture Parts (Built By Newport) are other wood manufacturers located in the Northeast Kingdom. In addition, Columbia Forest Products manufactures plywood in Newport City.

Harvest data compiled by the Vermont Department of Forests, Parks and Recreation indicate a gradual decline in sawlog harvesting in response to the softening of the lumber market. The decline in pulpwood harvesting, however, has been more dramatic, largely due to the loss of pulp mills in New Hampshire over the past decade.

Even though showing this cluster has experienced a decline in its employment base, the churning has spawned a number of developments in niche markets. As in the agribusiness and food processing cluster, forest and wood products is part of the traditional land-based economy of the Northeast Kingdom, which has many opportunities for convergence and intersection with other economic activities, including visitor and tourism. Changes to market conditions will likely continue to have a negative impact on demand for sawlogs and pulpwood. If the region shifts to renewable energy sources, however, the demand for whole tree chips and other biomass sources could expand opportunities for the forestry products industry.

A 2010 study estimates that the annual supply of Net Available Low-grade Growth (NALG) wood – wood that would be appropriate for use as a biomass fuel above and beyond current levels of harvesting – is slightly less than one million green tons statewide. Caledonia County has the lowest concentration of NALG in the state, and collectively, Essex and Orleans Counties have just over 107,000 green tons. However, the region borders NALG-rich Grafton and Coos counties, which have more than a half-million green tons each. While these estimates are far from precise and are highly sensitive to a number of external factors, our region should continue to support additional research to develop the biomass market in a sustainable manner.

The output in whole tree chip harvesting increased around 2008, when fossil fuel prices were high. End users for chips are typically power plants, such as the McNeil Plant in Burlington and the Ryegate Power Plant. Currently, the wholesale price of power, driven by relatively inexpensive natural gas, is keeping wood chips prices low. The lower prices, in turn, dictate how far chips can be transported cost-effectively. Given current conditions, it is reasonable to assume that the market area for the region's whole tree chip harvest is a 50- to 75-mile radius.

In 2012, Act 142 created the Working Lands Enterprise Fund and the Working Lands Enterprise Board (WLEB). The WLEB is made up State agencies and private sector members in the supply chains of

⁵ Vermont Dairy Promotion Council, Vermont Agency of Commerce and Community Development, Vermont Agency of Agriculture, Food and Markets: Milk Matters: The Role of Dairy in Vermont, December 2014

agriculture and forestry. The forestry subcommittee of the WLEB has created an "asset map" that includes information on the location and scale of facilities and businesses within the primary and secondary forestry industry. (http://workinglands.vermont.gov/node/736) Additionally, the Vermont Department of Forests, Parks, and Recreation hosts an online searchable directory of Vermont sawmills and veneer mills which is intended to help connect wood-using industries in the state to other businesses, as well as to policy and decision makers. (http://fpr.vermont.gov/forest/forest_business/sawmills) As of 2017 there were a total of 83 sawmills in the state, 19 of which were in the Northeast Kingdom: 9 in Caledonia County, and 10 in Orleans County.

Other industry support groups and programs include the Vermont Wood Manufacturer's Association, Vermont Technical College, the Vermont Community College System, the University of Vermont's Forestry Department, and the Small Business Development Center Program.

Sustainable Forestry

Keeping forests healthy simply makes economic sense. Many Vermont landowners already practice what is considered "sustainable" management without being certified. However, for consumers wishing to promote good environmental stewardship, certification is the only way to distinguish between wood products from an ecologically-sound forestry operation and wood from a less ecologically-sound operation. A growing number of consumers are willing to pay higher prices for certified wood from the former, and it may benefit landowners and manufacturers to be recognized for their responsible practices.

There are a number of certification programs available to landowners and forest product manufacturers. Third party certification involves an independent audit of forest management practices and certification that forestland is being managed in a sustainable fashion. Once certified, landowners can gain access to markets for sustainably produced wood products.

Certification programs are available through the Forest Stewardship Council, Vermont Family Forests, Sustainable Forestry Initiative and the Vermont Tree Farm Program. Because the cost of certification can be prohibitive for small operations, there is certification available for groups of landowners at lower costs. Certification is also available to groups of manufacturers.

The Vermont Sustainable Jobs Fund created the "Green Guide Specs," last updated in 2009, for use by architects, builders, facility managers and communities as a way to assist them in sourcing third-party-certified Vermont forest products for construction projects.

Visitor and Tourism (Star)

This industry cluster, which consists of leisure, hospitality, and recreation, has experienced significant growth, due in part to investments that have helped to make the region a year-round destination. Though these developments will continue to add jobs to its solid base of nearly 1,000 workers; wages remain relatively low within this industry.

The cluster thrives on a nexus with farming and forestry, which lend authenticity to the visitor experience. The working landscape has a noted "multiplier effect" on visitor and tourism businesses. Agri-tourism, which includes farm stays and tours and direct marketing of local agricultural products, is a growing trend within the region, as is eco-tourism. Forest-related recreation and tourism contribute about \$1.9 million annually to the state's economy.⁶

Among the leading leisure and hospitality industries in the area, the Jay Peak Resort continues its expansion with the addition of new facilities, equipment and new ski runs. From the continuing development of seasonal homes, hotels, condominiums, and recreational facilities Jay Peak Resort has become a four-season vacation resort. To provide some perspective on Jay's contribution to the regional economy, rooms tax

⁶ 2013. The Economic Importance of Vermont's Forest-based Economy, Northeast State Foresters Association.

receipts in Jay (town wide) account for more than 83% of all room tax receipts in the Essex/Orleans area. Burke Mountain has also made recent expansions, including a 100+ unit hotel, and recreation facilities.

The regional tourism industry also incorporates activities such as: biking, snowmobiling, hunting, cross-country skiing, and hiking to attract numerous visitors to the Northeast Kingdom. Along with the Jay Peak Resort and Burke Mountain, the four-season destinations mentioned above, there are numerous cross-country ski and cycling centers in the region. Kingdom Trails, the Craftsbury Outdoor Center, the Northwoods Stewardship Center, Lyndon Outing Club, Mempremagog Ski Touring Association, and Jay Peak include a thorough network of cross-country ski and cycling trails. The Vermont Association of Snow Travelers (VAST) has an extensive system of trails throughout the region for snowmobiles. As the Lamoille Valley Rail Trail continues to develop, this will bring additional visitors to the NEK region.

Fishing and boating are popular activities on the region's many lakes and streams. Recognized water trails located within the Northeast Kingdom include the Passumpsic Valley Riverway, a 20-mile water trail from East Burke to Barnet; the Northern Forest Canoe Trail, a 723-mile historic trail, follows a route used by native Americans to move from Lake Champlain to the Connecticut River Watershed; and the recently designated Connecticut River Water Trail are all popular canoeing waters. In the northwest part of the region, the Missisquoi River was recently designated as Wild & Scenic River by the federal government.

Fall foliage and scenic landscapes continue to be popular attractions. The Northeast Kingdom has developed a reputation as one of the best places to bicycle in the country. Many cyclists come during the foliage season or during the summer months, and most tour along the state highways. NVDA, with Agency of Transportation financing assistance, has identified a network of on and off-road bicycle touring routes throughout the Northeast Kingdom, consisting of a "loop and link" system, with courses ranging from 10 miles to 80 miles. Kingdom Trails, in East Burke, has an extensive all-season trail network, which is nationally popular with mountain bike enthusiasts (60,000+ visitors annually) and cross-country skiers. Other bicycle path projects are still in the planning stages including paths in St. Johnsbury and Newport.

Education and Knowledge Creation (Opportunity Cluster)

Composed of private education services, publishers and other information services, the education and knowledge creation cluster is in its incipient stage. This cluster showcases a number of nationally (and internationally renowned) educational institutions such as the St. Johnsbury Academy, Burke Mountain Academy, and Sterling College. While connections with other sectors of the regional economy are currently limited, forging stronger partnerships with these institutions (as well as the region's Career and Technical Centers) will be critical to building a skilled labor force.

Other Sectors

Health Care

The Northeastern Vermont Regional Hospital in St. Johnsbury and the North Country Hospital in Newport are among the largest employers the Northeast Kingdom. Employee counts in Essex are suppressed, but this sector, along with social assistance and education, make up the largest employment sector in the Northeast Kingdom.

Retail

Retail trade remains a challenge for many Northeast Kingdom communities. Taking into account the region's low population densities and changes in the retail industry, it has been difficult to attract or retain retailers of all sizes. There has been some growth through the 'dollar store' chains in a number of communities – Island Pond, North Troy, Hardwick, and Orleans. Other retail businesses that have located or remained in the region have often found the best strategy is to identify and concentrate on "niche" markets for specialty goods and services. These are areas where large retailers typically cannot compete efficiently or effectively. With a new Wal-Mart Supercenter in Derby, this strategy may make sense. Local merchants have been able to

fill some retail needs in most communities, but some local officials continue to seek retail opportunities for area residents.

The Town of St. Johnsbury continues working to revitalize its Railroad Street retail district. Several long-time retailers remain in downtown St. Johnsbury, and may attract other businesses. Rather than compete with Littleton for the same retail customer base, St. Johnsbury looks to develop its own niche in the retail sector, with a collection of unique destination shops and restaurants. That fact that St. Johnsbury has many cultural and historic assets provides a good basis for current economic recovery efforts.

Newport City is revitalizing its downtown retail sector through a comprehensive community development strategy. The development of the downtown, lakefront, rehabilitation of community facilities, streetscape beautification, and the relocation of state and federal government offices to the downtown, have aided the transformation of Newport's downtown central business district into an economically viable commercial area and place of employment.

Recent commercial growth in the region has been greatest in the following three areas:

- 1. U.S. Route 5 corridor between Derby and Newport City.
- 2. U.S. Route 5 in Lyndonville between the Interstate 91 and the village center.
- 3. U.S. Route 5 in St. Johnsbury, near the Interstate 91 exit (Exit 22) north of the city.

Government

Government, or public-sector, employment includes local, state, and federal employment opportunities. Educational institutions are typically large employers within the state and local government sectors. In 2016, 4,456 persons were employed by local, state, or federal governments, representing nearly one-fifth of all covered employment in the region. This sector has also includes individuals employed in public schools.

III. FOREIGN TRADE ZONE

In 2013, NVDA received a designation from the U.S. Department of Commerce to operate a Foreign Trade Zone (FTZ) for the three-county region. Lamoille County was added to NVDA's FTZ #286 in 2015. The FTZ program primarily benefits companies that import foreign materials, components, or goods for their processing or distribution. A number of manufacturers in the four-county region have been provided information on the FTZ program and it is likely that a few will sign up for participation in the near future.

IV. ECONOMIC INDICATORS

Wages and Income

Vermont's average weekly wage of \$870 falls well below the U.S. average of \$1,020. Wages for all three counties in the region fall well below the state average. Median, average, and per capita incomes in the Northeast Kingdom also fall below state levels. Essex County fares the worst, with incomes that are roughly 70% of state income levels. (Table 6.3) When broken out by gender, the statistics are even bleaker for working women across the state. In Vermont, median annual income for women working full-time is \$7,000 less than the median annual salary for men. This translates into a wage gap of 16 cents on every dollar earned by a man. The gap narrows to 14% when a woman holds a college degree, but if a woman has dependent

⁷ U.S. Bureau of Labor Statistics, 2nd Quarter 2017, All Establishments.

children, the wage gap increases to 23%8. About 6% of all NEK households are headed by a woman with dependent children, so this income gap has critical economic implications for the region.

Correlating to income levels, the three counties of the Northeast Kingdom have high poverty rates.

According to American Community Survey 5-Year Estimates, Essex and Orleans Counties have the highest poverty rates – 14.8% and 14.6% respectively. Caledonia County has a poverty rate of 12.8%, well above the statewide rate of 11.6%.

Table 6.3: Wages and Income								
	Average Weekly	Median Household						
	Wage	Income	Income	Income				
Caledonia	\$765	\$46,931	\$60,787	\$24,948				
Essex	\$724	\$39,467	\$49,494	\$22,191				
Orleans	\$681	\$43,959	\$56,883	\$24,204				
Vermont	\$870	\$56,104	\$73,016	\$30,663				
U.S.	\$1,020	\$55,322	\$77,866	\$29,829				

Education and Career Pathway Training

Education attainment is a defining marker of income inequality. In the Northeast Kingdom's population of 25 and older:

- 38.2% have only a high school diploma (or equivalent), compared to 29.9% of the population statewide.
- 11.6% have no high school diploma (or equivalent), compared to 8.1% of the population statewide.

More than two-thirds of Vermont's jobs will require some form of postsecondary education by 2020. Unfortunately, employers in advanced manufacturing and healthcare sectors in particular are already reporting shortages of qualified workers. Meeting the needs of a changing workforce will require doubling the number of Vermonters with either a college degree or credential of value⁹.

Workforce development continues to be one of the keys to economic development in the region. The Regional Technical Centers in Newport, Lyndonville, and St. Johnsbury, the Northeast Kingdom Collaborative, and area businesses agree that a lack of employees with specific skills is the greatest barrier to attracting new businesses and expanding existing

Table 6.4 Higher Education in the Northeast Kingdom and Vermont							
	Caledonia	Essex	Orleans	Vermont			
Total Population 25 and older	21,616	4,658	19,573	437,304			
Less than 9th Grade	2.9%	6.9%	4.6%	2.8%			
9th to 12th Grade, No Diploma	6.5%	8.8%	8.4%	5.3%			
High School Graduate (includes equivalency)	36.4%	44.1%	38.7%	29.9%			
Some College, No Degree	18.1%	14.6%	18.5%	17.3%			
Associate's Degree	8.5%	9.7%	7.8%	8.6%			
Bachelor's Degree	16.5%	10.2%	14.5%	21.7%			
Graduate/Professional Degree	11.2%	5.6%	7.6%	14.5%			

businesses. Fifty-six percent of Northeast Kingdom businesses, responding to a survey, said that an available, trained workforce was the biggest challenge facing their business.

⁸ Change the Story 2016 Status Report: Women, Work and Wages in Vermont.

⁹ 70x2025vt, a partnership between Vermont leaders in education, business, nonprofits, philanthropy, and local, state and federal government, defines as "credential of value" as a credential that indicates completion of a post-secondary academic or professional program that documents a set of skills or experiences as part of a career pathway that leads to employment and/or further educational opportunities.

Population

The past two censuses confirmed a slow growth rate in Vermont's population, with an annual growth rate of only 0.3%, compared to the nationwide growth rate of 9.7%. Vermont's population continues to show an overall slower rate of population growth, the three counties of the NEK are losing population. From 2010 to 2016¹⁰, Caledonia and Essex lost more than 2% of their respective populations. Orleans County lost more than one percent of its population over the same period. A perceived lack of attractive employment opportunities likely contributes to the out-migration of younger workers from the area.

V. EXTERNAL TRENDS AND FORCES

People have been concerned about future economic growth in the Northeast Kingdom, fearing that it will lead to unattractive commercial development and loss of the traditional Vermont landscape. Business interests view this concern as a potential threat to economic progress. Everyone agrees that efforts to revitalize downtowns can have economic and cultural benefits, but some people oppose limiting growth to existing growth centers and downtowns. Also, attempts to create a "livable wage" in Vermont continue to raise concerns about retaining existing businesses and attracting new ones, especially when similar wage initiatives are not happening in nearby states. It is acknowledged, however, that it is extremely difficult for someone earning minimum wage to improve their standard of living.

The availability of adequate and affordable childcare remains a challenge for many in the workforce and for those moving from welfare to work. The need for affordable childcare was identified by 85 % of the respondents in the Northeast Kingdom survey conducted by the Rural Economic Area Partnership. A lack of public transportation is another limiting factor for many low-income workers in rural communities where local employment opportunities are limited or nonexistent.

Property tax reform continues to be an issue for too many residents and businesses in the region. Education in Vermont is primarily funded by statewide property taxes which have steadily risen despite declining numbers of students in local schools.

Neighboring regions to the south and in New Hampshire seemingly put the Northeast Kingdom at competitive disadvantage in recruiting and retaining businesses. New Hampshire has no state sales or income tax and offers very low worker's compensation rates. Other Vermont regions are nearer large population centers and have access to a wider variety of goods and services. In addition, the nearest commercial airports (Burlington VT, Montreal QC, and Manchester NH) are two or more hours away from most Northeast Kingdom locations. However, recent expansions to the Northeast Kingdom International Airport may boost economic activity in the region over time.

Due to the rural character of the Northeast Kingdom, telecommunications companies continue to be slow to develop high-speed telecommunications systems throughout much of the region, thereby frustrating the growth of e-commerce and those wishing to "telecommute" from home. This can be attributed in part to a widely scattered population (customer) base and poor economic conditions, and less to environmental sensitivities regarding the location of new of telecommunication facilities.

VI. BUSINESS ASSISTANCE & FINANCING

There are many opportunities for business and financial assistance in the region. Several organizations provide a variety of services to help expand businesses and employment within the region. These organizations include:

 Northeastern Vermont Development Association (NVDA), with offices in St. Johnsbury and Newport, is a primary contact for Northeast Kingdom businesses. NVDA contacts and prospects for in-state and out-of-state clients that will fit the region, including participating in recruitment efforts in

¹⁰ US Census Bureau. Annual Estimates of the Resident Population, April 1, 2016 to July 1, 2016.

the province of Quebec. NVDA, in partnership with the Small Business Development Center, provides technical assistance for reviewing business plans, and connects with the appropriate state agencies for marketing assistance, workforce training funds, and growth incentive funds. NVDA submits grant proposals for community and economic development projects to a number of funding agencies. NVDA has lending programs that can provide loans of up to \$100,000. Funds are used to provide financial assistance for business start-ups, expansions, or relocations to the region.

- Northern Community Investment Corporation (NCIC), a regional partner, offers Small Business Administration (SBA) loans, lines of credit, direct loans up to \$100,000; loan guarantees; an equipment-leasing program; equity investments; arranges bank loans, and SBA 504 Fixed Asset Financing.
- Small Business Development Center (SBDC), a program of the U.S. Small Business Administration, maintains a presence at NVDA offices in St. Johnsbury and Newport, providing assistance to forprofit businesses to develop business plans for internal use or for loan proposals. The SBDC also offers management, marketing, financial, and production support to fledgling businesses.
- The Procurement and Technical Assistance Center (PTAC) is located in the NVDA Newport Office. The PTAC Counselor is available to assist businesses in the region get set up in a system that allows them to receive bid opportunities from local, state, and federal government agencies.
- Northeast Kingdom Community Action (NEKCA) Micro-Business Development Program provides information on how to start a business, creating marketing and financial plans, as well as general troubleshooting for micro-businesses.
- Vermont Economic Development Authority (VEDA) serves the entire state and offers a variety of business incentive programs. VEDA maintains an office in NVDA's St. Johnsbury building.

Local Revolving Loan Funds

The towns of St. Johnsbury, Lyndon, Barton, Hardwick, Brighton, Newport, and Canaan all have revolving loan funds for businesses that are capitalized in a variety of ways. Some of these are used solely for business development; others are broader in scope and are used for various community development projects.

Tax Stabilization Policies

Newport City, St. Johnsbury, Lyndon, and Hardwick each have adopted municipal tax stabilization policies that allow them to provide temporary benefits to new or expanding businesses that create employment in their respective communities.

GOALS AND STRATEGIES FOR ECONOMIC DEVELOPMENT

ECONOMIC DEVELOPMENT GOALS

- Reduce the region's unemployment rate.
- Train new and existing workers to meet the needs of area businesses and increase workers' salaries.
- Create higher-wage jobs.
- Coordinate economic development functions in the Northeast Kingdom.
- Assist municipalities in their economic development efforts.
- Increase and diversify the region's agricultural output, especially value-added production using local staple products and raw materials.

- Improve the economic infrastructure capacity (physical assets and workforce) in the Northeast Kingdom to meet current and future needs.
- Modernize and expand the region's telecommunications infrastructure to allow telecommuting and information technology-focused companies to grow and thrive.
- Maintain and revitalize the downtowns and village centers in the Northeast Kingdom.
- Make quality, affordable child care available to workers with children in the Northeast Kingdom.
- Expand tourism in the Northeast Kingdom, and make eco-based businesses a part of the region's landscape.
- Mitigate the negative effects that some past businesses have had on the environment.
- Increase research and start-up funds to aid value-added processing and to diversify the economy, especially for the region's farmers.
- Strengthen manufacturing, particularly in the forest products and industrial machinery sectors.
- Promote small business sectors, e.g. telecommuting, specialty foods, value-added businesses, arts and crafts and e-commerce.

ECONOMIC DEVELOPMENT STRATEGIES

- Provide technical and referral assistance for new and expanding businesses, and recruit new businesses.
- Market the programs and resources of NVDA.
- Assist existing manufacturing companies to grow by identifying and sharing new markets, technologies, and opportunities.
- Assess opportunities for coordination of economic development organizations.
- Provide greater access to revolving loan funds.
- Participate in regional and statewide economic development strategy efforts that involve the Northeast Kingdom region (CEDS, USDA REAP Zone, etc.).
- Participate in the development and implementation of a comprehensive workforce development strategy for the region.
- Assist with the revitalization of distressed areas and threatened employment sectors within the Northeast Kingdom.
- When possible, provide grant and technical assistance and project management to towns, organizations, and businesses throughout the Northeast Kingdom.
- Assist local planning commissions and development organizations in the Northeast Kingdom with economic development planning.
- Partner in economic development events with SBDC, PTAC, VMEC, VEOC, and others where regional businesses may benefit.
- Host business financing events so that businesses are aware of capital resources available.

- Assist municipalities with the planning, development, and maintenance of infrastructure projects that will improve economic opportunities, e.g. water, sewer, industrial sites, broadband, and transportation.
- Identify, prioritize and implement brownfield mitigation projects within the region.
- Support telecommunications infrastructure and knowledge capabilities by creating effective partnerships, and by advocating for increased infrastructure.
- Promote and advocate for economic development projects in village and downtown areas.
- Promote and maintain Downtown Designation and Village Center Designation where appropriate.