

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.

Largest Industry Sectors by Number of Businesses²	Number	%	Largest Industry Sectors by Employees³	Number	%
Retail (44-45)	300	14.2%	Educational services, and health care and social assistance	8,223	27.8%
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

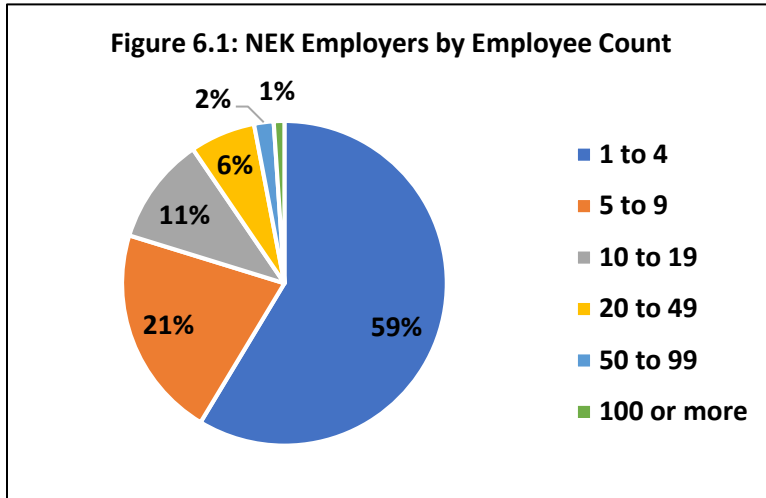
Other services, except public administration (81)	156	7.4%	Arts, entertainment, and recreation, and accommodation and food services	2,218	7.5%
Accommodation & Food Services (72)	138	6.5%	Public administration	1,819	6.1%
Manufacturing (31-33)	113	5.4%	Professional, scientific, and management, and administrative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

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

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

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

- 17 • Ethan Allen, Essex and Orleans Counties
- 18 • EHV Weidman Industries, Caledonia County
- 19 • Columbia Forest Products, Orleans County
- 20 • NSA Industries, Caledonia County
- 21 • Fairbanks Scales, Caledonia County
- 22 • Tivoly USA, Orleans County
- 23 • Lyndon Woodworking, Caledonia and Essex Counties
- 24 • Vermont Aerospace, Caledonia County

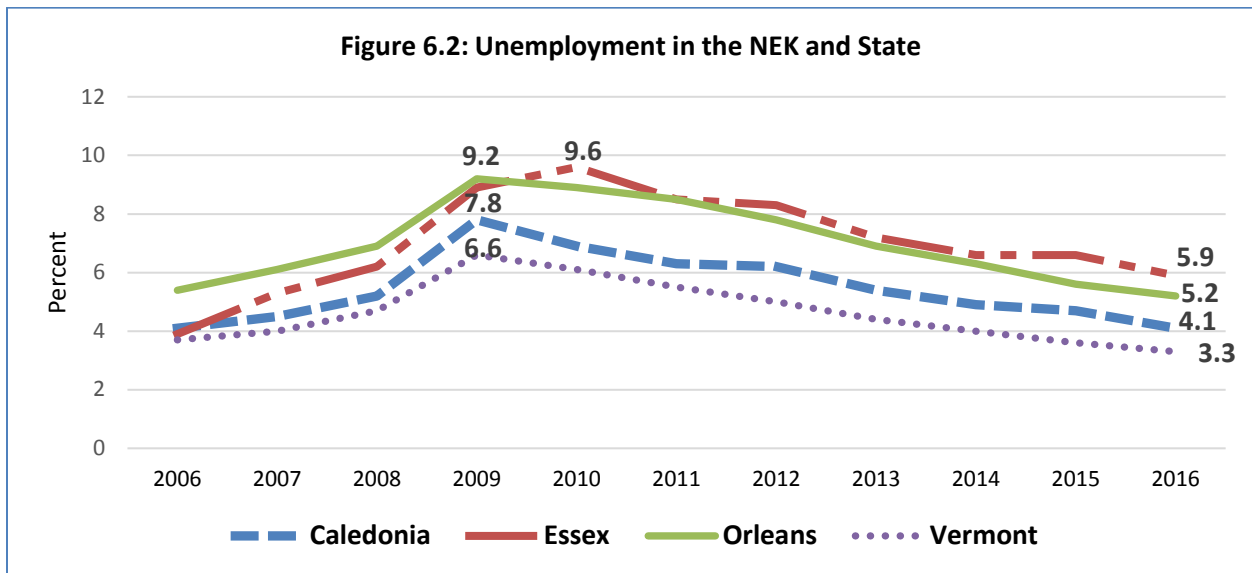


The bulk of employers in the region, however, are very small. According to 2015 data from County Business Patterns, 80% of the region's employers have fewer than 10 employees. (Figure 6.1)

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

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



16
17 Source: Vermont Department of Labor (*not seasonally adjusted)

18 Unemployment rates do not reflect a complete picture of the economic conditions of the region, as they only
19 reflect covered employment. In 2015, self-employed workers represented about 19% of the regional
20 workforce, compared to 17% of the state workforce.⁴ The U.S. Census Bureau reports on *nonemployers* using
21 tax return information from the Internal Revenue Service. These are largely self-employed individuals
22 operating unincorporated businesses (known as sole proprietorships), which may not be the owner's principal
23 source of income. The data consist of the number of businesses and total receipts by industry. More than half
24 of these non-employers are engaged in construction; retail trade; professional and technical services; forestry,
25 fishing, and agricultural support services; healthcare and social assistance, and other services.

26

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

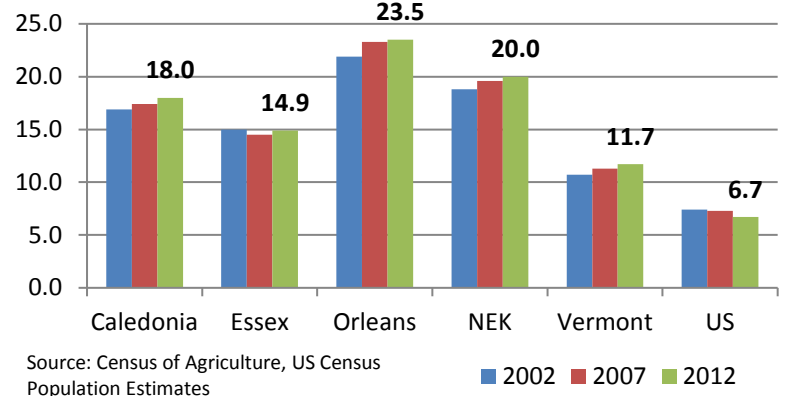
Industry Cluster Rankings

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.

Figure 6.3: Farms Per 1,000 Population



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

3 **Agricultural Trends**

4 The total market value of all Northeast Kingdom agricultural products (crops and livestock) grew to
 5 \$148,204,000 in 2012, an increase of 6.2% since 2007. While the value of livestock sales in the Northeast
 6 Kingdom dropped by 4.6% from 2007 to 2012, it still accounted for the majority (83%) of the value of all
 7 agricultural sales in the region.

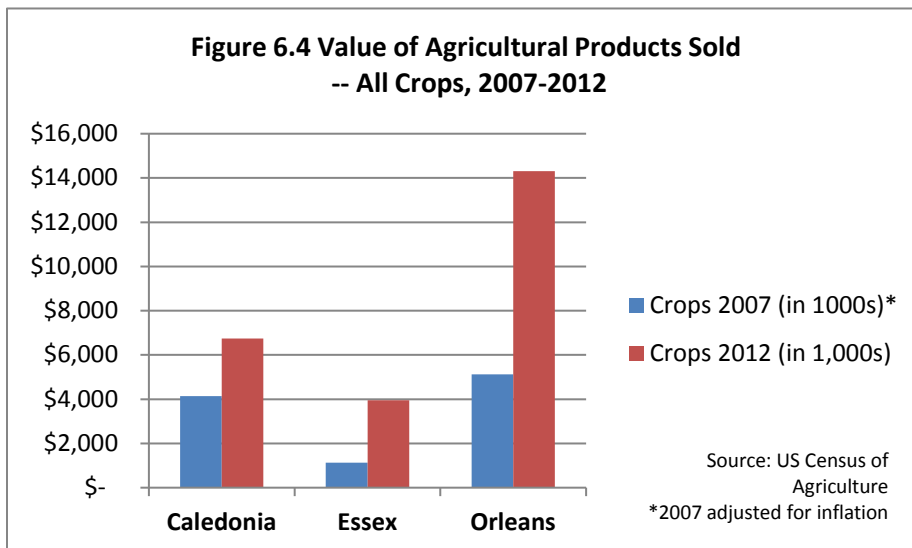
Table 6.2 Market Value of Agricultural Products Sold 2012, 2007*

	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

Source: 2012 Census of Agriculture, USDA
 *Adjusted to 2012 dollars using Bureau of Labor CPI Inflation Calculator

8
 9 Orleans leads in agricultural sales in the Northeast Kingdom, as shown on Table 6.4. Although there was no
 10 increase in the number of cattle and calves from 2007 to 2012, these animals still far outnumber other
 11 livestock in the Northeast Kingdom. However, sharp increases between 2007 and 2012 in the goat and sheep
 12 inventories in Orleans County, with a more modest rise in Caledonia County, indicates that livestock is
 13 beginning to diversify, and other animal products may account for a larger share of total livestock sales in
 14 future years.

15 The value of crop sales in the Northeast Kingdom saw a dramatic increase of 140% from 2007 to 2012.
 16 While crop sales only accounted for 7.4% of Northeast Kingdom total agricultural sales in 2007, it
 17 represented 17% in 2012. Crops include nursery and greenhouse crops. This may signal a trend in more local
 18 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

1 impacts statewide is about \$2.2 billion per year.⁵
2 There has traditionally been little farming in Essex County due to poor agricultural soils and rugged terrain,
3 but a large amount of the county's land area is covered by spruce-fir forest that is harvested commercially.
4 While a significant amount of forested lands has been converted into conservation use, some large parcels
5 have been developed for increased maple production. The Sweet Tree 1 project includes a maple processing
6 facility in Island Pond (in the former Ethan Allen plant), a large commercial sugar house in Avery's Gore, and
7 thousands of acres of sugarbush in northern Essex County. Similarly, the Island Pond Maple Factory, a bulk
8 maple processing company located in the former Island Pond Woodworkers facility has adaptively re-used an
9 existing building and employs local residents.

10 **Forest and Wood Products (Mature)**

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

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

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

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

37 The output in whole tree chip harvesting increased around 2008, when fossil fuel prices were high. End users
38 for chips are typically power plants, such as the McNeil Plant in Burlington and the Ryegate Power Plant.
39 Currently, the wholesale price of power, driven by relatively inexpensive natural gas, is keeping wood chips
40 prices low. The lower prices, in turn, dictate how far chips can be transported cost-effectively. Given current
41 conditions, it is reasonable to assume that the market area for the region's whole tree chip harvest is a 50- to
42 75-mile radius.

43 In 2012, Act 142 created the Working Lands Enterprise Fund and the Working Lands Enterprise Board
44 (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

1 agriculture and forestry. The forestry subcommittee of the WLEB has created an “asset map” that includes
2 information on the location and scale of facilities and businesses within the primary and secondary forestry
3 industry. (<http://workinglands.vermont.gov/node/736>) Additionally, the Vermont Department of Forests,
4 Parks, and Recreation hosts an online searchable directory of Vermont sawmills and veneer mills which is
5 intended to help connect wood-using industries in the state to other businesses, as well as to policy and
6 decision makers. (http://fpr.vermont.gov/forest/forest_business/sawmills) As of 2017 there were a total of
7 83 sawmills in the state, 19 of which were in the Northeast Kingdom: 9 in Caledonia County, and 10 in
8 Orleans County.

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

12 **Sustainable Forestry**

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

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

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

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

30 **Visitor and Tourism (Star)**

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

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

40 Among the leading leisure and hospitality industries in the area, the Jay Peak Resort continues its expansion
41 with the addition of new facilities, equipment and new ski runs. From the continuing development of
42 seasonal homes, hotels, condominiums, and recreational facilities Jay Peak Resort has become a four-season
43 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.

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

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

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

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

25 **Education and Knowledge Creation (Opportunity Cluster)**

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

32 **Other Sectors**

33 **Health Care**

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

38 **Retail**

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

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

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

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

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

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

17 **Government**

18 Government, or public-sector, employment includes local, state, and federal employment opportunities.
19 Educational institutions are typically large employers within the state and local government sectors. In 2016,
20 4,456 persons were employed by local, state, or federal governments, representing nearly one-fifth of all
21 covered employment in the region. This sector has also includes individuals employed in public schools.

22

23 **III. FOREIGN TRADE ZONE**

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

29

30 **IV. ECONOMIC INDICATORS**

31 **Wages and Income**

32 Vermont's average weekly wage of \$870 falls well below the U.S. average of \$1,020. Wages for all three
33 counties in the region fall well below the state average.⁷ Median, average, and per capita incomes in the
34 Northeast Kingdom also fall below state levels. Essex County fares the worst, with incomes that are roughly
35 70% of state income levels. (Table 6.3) When broken out by gender, the statistics are even bleaker for
36 working women across the state. In Vermont, median annual income for women working full-time is \$7,000
37 less than the median annual salary for men. This translates into a wage gap of 16 cents on every dollar earned
38 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.

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

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

4 According to American Community Survey
 5 5-Year Estimates, Essex and Orleans
 6 Counties have the highest poverty rates –
 7 14.8% and 14.6% respectively. Caledonia
 8 County has a poverty rate of 12.8%, well
 9 above the statewide rate of 11.6%.

	Average Weekly Wage	Median Household Income	Average Household Income	Per Capita 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

11 Education and Career Pathway 12 Training

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

- 16 • 38.2% have only a high school diploma (or equivalent), compared to 29.9% of the population
 17 statewide.
- 18 • 11.6% have no high school diploma (or equivalent), compared to 8.1% of the population statewide.

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

23 Workforce development
 24 continues to be one of the
 25 keys to economic
 26 development in the region.
 27 The Regional Technical
 28 Centers in Newport,
 29 Lyndonville, and St.
 30 Johnsbury, the Northeast
 31 Kingdom Collaborative,
 32 and area businesses agree
 33 that a lack of employees
 34 with specific skills is the
 35 greatest barrier to attracting
 36 new businesses and
 37 expanding existing

	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%

38 businesses. Fifty-six percent of Northeast Kingdom businesses, responding to a survey, said that an available,
 39 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.

1 Population

2 The past two censuses confirmed a slow growth rate in Vermont's population, with an annual growth rate of
3 only 0.3%, compared to the nationwide growth rate of 9.7%. Vermont's population continues to show an
4 overall slower rate of population growth, the three counties of the NEK are losing population. From 2010 to
5 2016¹⁰, Caledonia and Essex lost more than 2% of their respective populations. Orleans County lost more
6 than one percent of its population over the same period. A perceived lack of attractive employment
7 opportunities likely contributes to the out-migration of younger workers from the area.

9 V. EXTERNAL TRENDS AND FORCES

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

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

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

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

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

38 VI. BUSINESS ASSISTANCE & FINANCING

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

- 42 • Northeastern Vermont Development Association (NVDA), with offices in St. Johnsbury and
43 Newport, is a primary contact for Northeast Kingdom businesses. NVDA contacts and prospects for
44 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.

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

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

23 Local Revolving Loan Funds

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

27 Tax Stabilization Policies

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

32 GOALS AND STRATEGIES FOR ECONOMIC DEVELOPMENT

33 ECONOMIC DEVELOPMENT GOALS

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

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

15 **ECONOMIC DEVELOPMENT STRATEGIES**

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

- 1 • Assist municipalities with the planning, development, and maintenance of infrastructure projects that
2 will improve economic opportunities, e.g. water, sewer, industrial sites, broadband, and
3 transportation.
- 4 • Identify, prioritize and implement brownfield mitigation projects within the region.
- 5 • Support telecommunications infrastructure and knowledge capabilities by creating effective
6 partnerships, and by advocating for increased infrastructure.
- 7 • Promote and advocate for economic development projects in village and downtown areas.
- 8 • Promote and maintain Downtown Designation and Village Center Designation where appropriate.
- 9