Brandon Town Plan

Adopted February 22, 2016
Amended October 14, 2019

Prepared by
the Brandon Planning Commission
under the authority of
the Vermont Statutes Annotated
Title 24, Chapter 117

TABLE OF CONTENTS

"*The surface of the town is generally level. The Green Mountains lie along the east line, presenting some lofty summits while to the west is the smaller Taconic Range, which ends apparently in the Sudbury area. The principal streams are Otter Creek, which runs through the town from south to north, and the Mill or Neshobe River, which rises among the mountains in Goshen and enters the town from the east. At the foot of the mountains, the Mill or Neshobe River receives the waters of a small pond, called Spring Pond and becomes a considerable mill stream*." So wrote Mrs. Augusta Kellogg in 1899 and it is much the same today.[1]

[1] Brandon, Vermont: A History of the Town 1761-1961; published by the Town of Brandon, 1961.

OVERVIEW

The Brandon Town Plan is the primary, if not definitive, statement of the Town's values, especially regarding how future growth and development should proceed in order to promote the health, safety and welfare of its citizens. In general, the goals, policies and action steps[2] found in the Plan are meant to preserve and protect the town's assets while providing for improvements and growth that support the community. The findings and action steps contained in this Plan s influence the Town's budget and capital expenditures, community development, historic preservation, economic development, and wise use of resources. The Plan is the basis for Brandon's zoning and other ordinances relating to development, the local economy, and our quality of life. The long-range goals and vision in this Plan seek to address the town's needs during the next 20 years, while the Plan is to be readopted at least every five years to reflect changing circumstances and the achievement of shorter-term goals.

Vision for the Future

Brandon is an intimate, warm and walkable small town. From Downtown to Forest Dale to Park Village, Brandon and its residents have a strong sense of place and are proud of our significant community and historic assets, including a settlement pattern of dense villages surrounded by farm and countryside that has been lost in all but a handful of Vermont communities. Brandon, especially its downtown, provides the essential goods and services that have moved to the outskirts of many other Vermont towns. Our town also provides the locals and residents of surrounding towns with jobs, retail goods and services, and the social and civic benefits of an active and diverse community. This vision will be achieved through the goals, policies, and action steps contained within each section of the Plan.

Use of the Plan

The Plan is intended to be the foundation for community programs, policy setting, and decision-making. The findings and recommendations will influence the Town's budget and capital expenditures, community development efforts, and natural resource protection initiatives. The Plan is the basis for the local land use controls such as those in the Brandon Land Use Ordinance. The Plan is intended to be read and used in its entirety. Interested people are encouraged to study the whole plan rather than just the Overview and readers should consider individual policies and recommendations in the context of the whole Plan rather than as stand-alone concepts. Because the Plan is not able to fully address every important local issue, it should also be used as a source of topics for further study. The Plan is to be given full effect in all appropriate regulatory proceedings such as Act 250.

[2] The statute governing municipal plans discusses "recommendations" and "recommended" programs and policies. 24 V.S.A. § 4382. We have chosen the term "action steps" to reinforce the idea that the recommendations in this plan are intended to be acted upon and the goals achieved.

Statutory Authority

The Vermont Municipal and Regional Planning and Development Act (Chapter 117 of Title 24, Vermont Statutes Annotated) guides the preparation of town plans in the state. The Act specifies how a Plan should be developed and what it should contain. This Plan was prepared, adopted, and approved in conformance with the statutory requirements of the Vermont Municipal and Regional Planning and Development Act (Chapter 117 of Title 24, Vermont Statutes Annotated). It is consistent with the Rutland Regional Plan, as readopted June 16, 2015, and is compatible with the approved plans of surrounding communities of Sudbury, Chittenden, Pittsford, Hubbardton, Goshen, and Leicester. Under the authority of the Select Board, the Brandon Planning Commission, in concert with other interested parties, prepared the Town Plan and submitted it for final approval by the Select Board. The Planning Commission provided a copy to the Rutland Regional Planning Commission and all surrounding towns.

Preparation of the Plan

The Brandon Town Plan was last rewritten and adopted in 2005. This version was re-adopted on December 17, 2007 in anticipation of a full update in 2008. An interim version was then adopted May 19, 2014, with the intention of serving as a launching point for comprehensive review, revision, and update.

The current update has been drafted by members of the Planning Commission with input from residents, town government, and Brandon community organizations. Public facilitation and technical assistance, made possible by a Municipal Planning Grant and a Community Canopy Grant, has been provided by Robert Black, Architect; Broadreach Planning & Design; and the Rutland Regional Planning Commission. Special thanks are due to Kevin Thornton for his review of the Historic & Cultural Resources section and to everyone who participated in this revision.

Information on the Plan development and drafts of the Plan has been made widely available both in hard copy and via the Town's website. A public hearing was held in accordance with statute. Several surveys and open meetings, including the new Barn Raising initiative, were conducted by the Planning Commission while updating the Plan, and many elements reflect implementation of the ideas and information received. The public has been encouraged to participate at every meeting, and more public input was solicited during the approval process.

Development of this Plan has been another step in an ongoing series of efforts that demonstrate the dedication, care and esteem in which Brandon's residents hold their town. Citizens have repeatedly shown a remarkable willingness to volunteer their time, energy and money. Examples of this dedication include efforts to preserve the Brandon Town Hall and the Stephen A Douglas Birthplace. All of this work toward a common goal of community building and adaptive reuse of old buildings for business and social purposes are examples of local investment in the town as we know it today and to our vision for its future.

Planning and Property Rights

The purpose of this Plan is to maximize the quiet enjoyment and productive use of private property while maintaining the highest standards of health and safety and promoting the general welfare through the coherent, shared, and comprehensive community vision expressed in its pages.

"Ownership is the set of rights and duties allowing one to use, manage, alter, or convey property."[3] Property ownership is often described "a 'bundle of sticks'—a collection of individual rights which. .....State law determines only which sticks are in a person's bundle."[4] Generally, the "sticks" – the primary property rights – are use, management, quiet enjoyment, and the ability to sell or lease the land.[5]

The state can limit or even eliminate one or more sticks in the bundle through legislation intended to protect the health, safety, morals, and general welfare of its citizens, so long as it does not entirely deprive the owner of beneficial use of the property.[6] Aesthetics is also recognized as a legitimate public interest. "Aesthetic and environmental wellbeing, like economic wellbeing, are important ingredients of the quality of life in our society, and the fact that particular environmental interests are shared by the many, rather than the few, does not make them less deserving of legal protection through the judicial process."[7] This is important because aesthetics has been found to be one of the main things that attracts and binds people to a community.[8]

Through Chapter 117 of the Vermont Statutes Annotated, municipalities are given the power to create a Town Plan and regulate land use. The reason for this may be found in the Vermont Constitution: "That every member of society hath a right to be protected in the enjoyment of life, liberty, and property, and therefore is bound to contribute the member's proportion towards the expense of that protection, … nor are the people bound by any law but such as they have in like manner assented to, for their common good." Thus, it may be said, our rights are secure only in proportion to our willingness to participate financially and politically.

Implementation of this Plan will necessarily involve a balancing of public and private interests, and all members of the Brandon community are encouraged to participate in ongoing, constructive dialogue to achieve the common good.

[3] *State v. Gillard*, 88 A.3d 389, 2013 VT 108 (Vt. 2013).
[4] *United States v. Craft*, 535 U.S. 274, 122 S.Ct. 1414, 152 L.Ed.2d 437 (2002) (citations omitted).
[5] *See* Black's Legal Dictionary, 9th ed., 1215 (defining "ownership").
[6] *Alger v. Department of Labor & Industry*, 917 A.2d 508, 2006 VT 115 (Vt. 2006).
[7] *Sierra Club v. Morton*, 405 U.S. 727, 92 S.Ct. 1361, 31 L.Ed.2d 636 (1972).
[8] (What Attaches People to Their Communities?)

Goals, Policies, and Action Steps

24 V.S.A. § 4382 (1): A statement of objectives[9], policies, and programs[10] of the municipality to guide the future growth and development of land, public services, and facilities, and to protect the environment;

Each section of this plan contains goals, policies, and action steps that shall guide the Town in the Plan's implementation through both regulatory and non-regulatory means. In addition, as a new initiative, this Plan incorporates accomplished goals and action steps from past plans. Since Accomplishments is a new feature, and the format of goals and action steps has changed, the subsection will not appear in every section, but it's expected that future iterations of the Town Plan will list more and more accomplishments.

[9] This Plan uses the term "goal," but the intended meaning is the same.

[10] The Planning Commission believes the term "action steps" appropriately addresses the "program" component. Action steps within this plan are formulated to be "SMART": Specific, Measurable, Assignable, Reasonable, and Time-bound

COMMUNITY PROFILE

Physical Characteristics and Location

The Town of Brandon encompasses 25,152 acres, or 41 square miles, and is bisected by US Route 7. Included within the Town are the villages of Brandon and Forest Dale. Brandon is located at the north central border of Rutland County. Rutland City, our county seat, sits to the south, and Middlebury, shire town of Addison County, sits to the north. Our Town is thus a gateway between the two counties and is considered a “sub-regional center” by the Regional Planning Commissions in Rutland and Addison Counties.

History

When the first settlers came to the area in the mid-1770s, they established the village of Neshobe. The area was rich in natural resources with excellent farmland along the rivers and abundant supplies of timber and minerals. The historic Crown Point military road came through Brandon to connect Lake Champlain to the east coast. The Town grew and flourished during the 1800s with several industries relying on the key resources of waterpower, iron ore and marble. The coming of the railroad in 1849 enabled the manufacture and shipping of iron-based products such as the Howe scale, as well as Brandon paints, wood products and marble.

During its century of rapid growth, Brandon Village evolved a unique village plan. The Congregational and Baptist churches were built on either side of the Neshobe River, each with its own green laid out at a bend in the road. In the ensuing decades, government, commerce and prominent individuals developed commercial streets at the core which radiated out from the greens lined with residences leading to farms, mines and quarries in the Town.

As the early industries began to decline, dairying, stockbreeding and tourism became increasingly important and ensured the vitality of Brandon in the 20th century. The establishment of the Brandon Training School in 1915 was a significant event, providing many employment opportunities for area residents. At its height, the Training School served over 600 Vermont residents. Changes in policy and social service practices lead to closing the facility in November 1993. The campus, now called Park Village, is used for a variety of purposes including residential, industrial, and institutional uses.

Today Brandon is a thriving, diverse community offering a full range of services for its citizens. Several industries, a variety of shops and services provide many opportunities for town residents and surrounding communities.

Government

While Brandon continues the tradition of a yearly "Town Meeting," in 1947, Brandon adopted the Select Board/Town Manager form of government, which delegated general supervision of

the affairs of the Town to an employed Town Manager. The Select Board remains the governing body of the Town. Three of the five Select Board members are elected for three year staggered terms, while two are elected annually. Other governing bodies include Brandon Fire Districts #1 and #2 and Brandon Town School District. Brandon elects members to the Otter Valley Union High School Board of Directors.

Socioeconomic Information

An analysis of a community's population, housing, and economic activity is an important feature of a municipal plan. This socioeconomic information allows the Town to estimate future population growth or decline, anticipate impacts on community services and land use, and respond to the changing needs and demands of citizens. The following information is a highlight of recent trends in the Town of Brandon. Most of the data is based upon the 2010 Census.

Population

According to the 2010 Census, Brandon has the fourth highest population of the 27 communities in Rutland County: 3,966.

Age and Social Characteristics

Brandon's median age rose from 33.7 in 1990 to 44.7 in 2010, largely as a result of increases in the middle age segment of the population. Brandon's population by age is in most cases similar to the county. The school-age demographic makes up a slightly larger percentage of the total population within Brandon than exists at the county level.

The aging of the population is a development with potentially significant planning implications. For example it suggests that the town should anticipate increased and changing demands for community and health-oriented services. It also suggests the need to attract workers to replace people who retire from the workforce.

Households

The distribution of Brandon's population within the community is also becoming more disperse. The average household in the community, which shrunk somewhat between 1990 and 2000, has remained fairly steady and 2-3 (average: 2.36) persons per household. Consequently, the overall number of households has also remained rather steady, increasing by just 1 percent from 2000 to 2010.

Brandon has a higher percentage of families relative to total households (63.8%) than the county (61.6%) and the state (62.5%), even with a percent decrease between 1990 and 2000. In addition, Brandon's number of single-parent families with children under the age of 18, as a percentage of all families has risen to 33 percent in 2010, up from 27.2 percent in 2000 and

26.3 percent in 1990. Single-female families dominate this category, representing over 70 percent of the single-parent families in Brandon.

Income and Employment

Median household and family incomes have risen over the period from 1989 to 1999 and continue to rise. Brandon incomes are lower than those for Rutland County and the state. An increasing number of women are employed as a percentage of the total employment population over age 16. In 1980, 44.3 percent of the total workforce was women. In 2000, 50.5 percent of the total workforce was women, and that percentage has remained around 50 percent ever since.

According to the American Community Survey 5-year estimates, the 2010 general poverty rate in Brandon was 11.2 percent, a decrease from 17.9 percent in 1990. Also, the percentage of families in poverty decreased from 12.7 percent in 1990 to 6.8 percent in 2000. Although it had increased to 8.8 percent by 2010, the margin of error of almost 5 percent diminishes the utility of these figures. The level of education for persons over the age of 25 has greatly increased. These poverty and education numbers indicate a significant shift in the overall economic well-being of the community.

The unemployment rate in 2010 was 9.6 percent of the labor force and declining.[11] In 2000, Brandon residents were primarily employed in the manufacturing, retail trade, and education sectors. By 2010, following a national pattern, residents were primarily employed in the education, sales, and service sectors. The largest increases from 2000 to 2014 were building-construction, leisure and hospitality, and financial activities.

[11] http://www.homefacts.com/unemployment/Vermont/Rutland-County/Brandon.html

PUBLIC FACILITIES AND SERVICES

24 V.S.A. § 4382 (4) A utility and facility plan, consisting of a map and statement of present and prospective community facilities and public utilities showing existing and proposed educational, recreational and other public sites, buildings and facilities, including hospitals, libraries, power generating plants and transmission lines, water supply, sewage disposal, refuse disposal, storm drainage, and other similar facilities and activities, and recommendations to meet future needs for community facilities and services, with indications of priority of need, costs and method of financing.

Introduction

This section contains information on services provided directly by the Town, by other government agencies, and by non-governmental organizations. The services are provided for by general budget allocation or by specific vote at Town Meeting.

Goals

- Attract and keep people, businesses, and organizations in Brandon by providing high-quality municipal infrastructure and services.
- Attract and keep people, businesses, and organizations in Brandon by supporting non-municipal service providers.

Policies

- The Town of Brandon will maintain public facilities and services infrastructure tosatisfy the current demand and accommodate additional growth consistent with this Town Plan.
- The Town of Brandon shall develop an integrated and efficient infrastructure system to provide the services required by residential, commercial and industrial members of the community while minimizing adverse fiscal impact.
- When constructing, expanding, or providing public or private community facilities and services, ensure consistency with the goals and policies of this Plan including whether or not it would contribute to the desired land use pattern of a central, compact town center and clustered development.

Utilities Infrastructure

Water Supply

Domestic water is supplied in the villages of Forest Dale and Brandon by Fire District #1. In 2002, Brandon Fire District # 2 was created through acquisition of the community public water supply system from the Forrestbrook Water Corporation. This loop system serves over 50 residences in the Forrestbrook housing development north of Forest Dale in the Aquifer land use district.

Brandon Water System

Sources	**Estimated Capacity**
Primary Source: Well #2	630 gallons per minute
Secondary Source: Well #1	450 gallons per minute
Source Well #3	700 gallons per minute
Storage	
Glass-lined storage tank. Installed in 1989.	928,000 gallons
Earth-covered, concrete reservoir.	500,000 gallons
Water tower	750,000 gallons
Distribution	
Loop System with a 14" main from the storage tanks through an 8" main interconnected at three points to provide higher fire flows.	

Well #3 became operational in 2002 and supplies up to 700 gallons per minute. The town owns the land and can control development in close proximity to the wells at this location. Well #1 is an 'unconfined aquifer' meaning there is no layer of clay between the bottom of the well and possible sources of pollution on the surface. To insure the quality of the water, the Town owns land surrounding this well head.

As also noted in the Natural Resources section, in December 2011, Brandon Fire District #1 was the first public water system in Vermont to receive a Class II Groundwater Reclassification from the Agency of Natural Resources. Class II groundwater is suitable for public water supply use, has uniformly excellent character, is in use as a public water supply source or has a high probability for such use, and is exposed to activities which may pose a risk to its current or potential use as a public water supply source.

The Town of Brandon has water supplies well in excess of current demand. The average daily demand is about 450,000 gallons per day (GPD). The combined storage facilities, excluding the water tower, hold a three-day supply of water.

The system is metered with usage billed semi-annually. Connection fees are placed in a capital project fund for major improvements and repairs, while user fees are charged to fund operating expenses. Major expansions to the service area are not currently planned, but extensions to

serve pockets of land or development near existing lines are considered. Connections within the District are routinely made upon payment of a connection charge based on projected usage.

The public aquifers from which the well water is drawn have been identified and mapped. Land use regulations are in effect to protect the water sources. Because the community water system is heavily dependent upon ground water, it is essential that development near the aquifers be strictly controlled to protect the quality of the water. Water outside District boundaries is supplied by individual wells. Areas with a large concentration of wells should be considered for future aquifer protection.

EPA and the VT Geological Survey have done some assessment work in 2008 to identify additional areas for water supply. There are good sand and gravel layers on McConnell Road that are indicative of an aquifer. They have done some seismic studies to see if they could identify gravels and the top of bedrock. So far, the assessment work looks promising for the potential to develop more water supply capacity if needed. There is some follow up work planned.

Sewer

The Town of Brandon owns and operates a secondary treatment sewage plant for the treatment of household waste within the collection system. Treated effluent is discharged into the Neshobe River and flows adjacent to the site. Sludge from the treatment beds is trucked to Rutland City. The sewer plant serves areas of Brandon and Forest Dale.

The plant has a design capacity and permitted flow of 700,000 gallons per day. The normal dry weather flow is about 300,000 gallons per day. The current permitted load is 580,000 mgd.

The sewer system is user-fee based. Connections are made within the service area upon payment of the connection fee. Several improvements have been made to the sewer system including dechlorination of the effluent, repair of the Forest Dale pump station, installation of electrical code explosion-proof circuitry, and separation of the storm water drainage from the sanitary system. The current type of treatment process is oxidation ditch and extended aeration with phosphorous removal. The sewer system has been extended to a pump station in the Industrial Park to Carver Street and the Neshobe House. Removing roof drains, sump pumps, and building drains as well as repairing aging lines and infrastructure remain the department's priority.

Action steps – Water & Sewer

- The town shall provide strong protection measures for the aquifers that arethe water source for the fire district wells. Any new development in the aquifers must be connected tothe town sewer system and priority should be given to

extending sewer lines to residences within the aquifer protection area that are not currently connected.

- Expansion of either water or sewer service areas should be made to serve areas of failing in-ground disposal systems or areas where existing wells have low volume or poor water quality. Expansions to serve new development shall be carefully coordinated with land use constraints so that development is directed into the most suitable areas. Developers will be expected to bear all or part of the cost of the expansion.

Municipal Services

Brandon is governed by an elected Select Board. Day-to-day administration is provided by a Town Manager employed by the Board. The Town Manager administers the budget, supervises various town departments, serves as the spokesperson for the town, and represents the town. The Manager also coordinates other functions of government that are not under the Manager's direct supervision, such as tax assessment and records.

Town Offices

As of 2005, Town government was located in what the Plan termed "inadequate quarters" at the corner of Center and West Seminary Streets. At that time, the Select Board was considering several options for relocating the town offices. In 2011, Tropical Storm Irene rendered those offices unusable, resulting in relocation of town functions first to the firehouse, then to a rented location on Route 7 south of downtown. Through a HUD Community Development Block Grant and the pro bono efforts of several townspeople, the town offices are expected to return to the downtown location in 2016.

Fire Protection

Fire protection in Brandon is provided by the Brandon Fire Department which is an all-volunteer organization consisting of 30 active members. A new firehouse was constructed in 1998 on Franklin Street, substantially increasing the available space and combining offices, training quarters, vehicle storage facilities and garaging under one roof. The organization is supported by funds from a town-wide tax and is governed by the Prudential Committee for Fire District #1 with three elected members.

Considering its size, the Brandon Fire Department serves a broad area. In addition to serving the Town of Brandon, there are mutual aid agreements with towns in both Addison and Rutland Counties.

A system of fire hydrants is maintained within Fire District #1 which provides a high degree of firefighting effectiveness. Radial distance to be traveled from the fire station during an emergency is approximately three miles. The department is capable of reaching the outermost

point in Brandon within four to six minutes. The District responded to 156 calls in 2013, which totaled 2,902 personnel hours.

Although the Fire District currently operates independently, it is in the public interest that the organization remains knowledgeable and aware of future growth trends and development patterns in Brandon. Location, access to, and density of a new development should include provision for effective fire protection. Cooperation between the Fire District, the Town and the Planning Commission in the mutual assessment of growth in relation to equipment and manpower needs will continue to ensure superior quality fire protection service in Brandon.

Police Protection

The authorized strength of the Brandon Police Department is seven full-time officers. The department routinely assists the Vermont State Police from the Rutland and New Haven barracks. On occasion, VSP assists the Brandon Police Department.

Since the last iteration of this Plan, the Police Station has relocated from the second floor of the Town Offices on Center Street to Route 73 / Forest Dale Road.

Solid Waste Disposal

The Transfer Station is operated by a contractor. They staff the transfer station and are responsible for directing the disposition of solid waste materials, as well as assisting individual citizens and private waste haulers who deposit solid waste and recyclables during the transfer station operating hours. The contractor also coordinates the disposition of other recyclable materials including batteries, waste oil, scrap metal, tires, and yard wastes. The town presently contracts with a private contractor for removal of solid waste, construction and demolition debris, and certain other recycling materials. The Town of Brandon owns and maintains a closed landfill which ceased operation on July 11, 1992. Citizens voted to join the Rutland County Solid Waste District in 1992.

The transfer station and recycling center operation is a separate enterprise of the Town of Brandon. Charges for the disposal of solid waste are calculated by weight. These fees are the primary revenue source.

Community Facilities

Brandon Free Public Library

In 1900, the Brandon Free Public Library Association was formed and in 1901 it set up operation in the front room on the lower floor of the Parmenter Block, the building it now occupies. In 2001, the library celebrated its 100th anniversary.

The library is staffed by two full-time and one part-time librarian as well as volunteers. In addition to Brandon, the library serves the communities of Sudbury, Leicester and Goshen. The library also provides meeting space for a wide variety of local organizations and programs. Annual circulation is approximately 34,206 books, down from 49,000 books in 2008. The library also has an extensive media collection and a wide variety of periodicals and newspapers. There are a number of internet-accessible computers available to the public. Historically, about half of the library's budget has been included in the Town's budget, which is voted each year at Town Meeting; recently, the library's funding has been voted as a separate appropriation, which voters overwhelmingly approved. The remainder of the budget is raised by the interest from the Library Trust Fund, private donations, fees, property rental, and the fund raising activities of the Friends of the Library.

Brandon Area Rescue Squad (BARS)

BARS serves the towns of Brandon, Leicester, Sudbury and Goshen. The agency has approximately 37 full-time active members, all volunteers, who sign up for shifts to provide coverage 24 hours a day, seven days a week. In 2008 they hired their first employee to assist with daily operations. BARS responded to a total of 690 calls in 2012 in all four towns. The agency routinely provides training for Emergency Care Attendants. Training for Emergency Medical Technicians and Emergency Medical Techniques Intermediate Level (I.V.), is provided by the Rutland Regional Medical Center.

Funds are raised through town appropriations in Brandon and area communities. Several years ago BARS instituted a billing program that has allowed them to purchase and replace equipment and initiate a Community Service Fund to be used for medically related community needs or project.

Brandon Senior Citizens, Inc.

Organized as a private non-profit service organization, the Brandon Senior Citizens own and operate the Senior Citizen's Center in Illingworth Hall located on Forest Dale Road. The Center is open on a varied schedule and serves lunch most Mondays. In addition, monthly dinners are hosted by Brandon Senior Citizens, and the facility is available to rent for private functions. The Town uses Illingworth Hall for public meetings, such as those of the Planning Commission and the Development Review Board.

Brandon Senior Citizens raise funds through an active fundraising program, through grant programs for senior citizens, and through town appropriations.

Brandon-Leicester-Salisbury-Goshen Insect Control District

Brandon is a member town in the local Insect Control District. Brandon's share of costs is included as a budget line item. The District owns equipment and hires a coordinator. Each member town has a spot on the District's Board of Directors. The goal of the District is to provide an integrated pest management program so that the residents of our member towns can enjoy, as much as possible, bug free summers. The District uses volunteers to aid with sampling and treating. They also run a Mosquito Hot Line, so residents can call in troublesome spots.

Educational Facilities Plan

24 V.S.A. § 4382 (6) An educational facilities plan consisting of a map and statement of present and projected uses and the local public school system;

Many long-time residents of Brandon, those who grew up here, recall that The Neshobe School was the elementary school of bus riders, while residents of Brandon "Village" walked to the elementary school in Town.

Today, all elementary education (grades pre-K-6) in Brandon is provided by The Neshobe School. A comparison of enrollment figures since 2010 is shown below. The Town of Goshen has an agreement to also send students to Neshobe School.

School Participation Information	2010-2011	2011-2012	2012-2013	2013-2014
Total School Enrollment	418	403	399	401
Attendance Rate	94.28%	95.80%	94.86%	-
Student/Teacher Ratio	17.13	15.86	15.48	-
Source: Vermont Department of Education School Report http://education.vermont.gov/data/				

Figure 1 Neshobe School: General School Information

Secondary education, grades 7-12, is provided by Otter Valley Union High School (OVUHS) which also serves Brandon, Pittsford, Goshen, Leicester, Sudbury and Whiting. In addition, students have the option of choosing Stafford Technical Center in Rutland for specialized technical training in a wide variety of fields.

School Participation Information	2010-2011	2011-2012	2012-2013	2013-2014
Total School Enrollment	580	576	572	541
Attendance Rate	93.84%	90.62%	96.96%	-
Student/Teacher Ratio	12.74	12.91	12.99	-
Source: Vermont Department of Education School Report: http://education.vermont.gov/data/				

Figure 2 Otter Valley UHS #8: General School Information

The school-aged populations served by both the Neshobe and Otter Valley schools are likely to decline or remain steady over the next decade. Therefore, capacity of existing schools to serve the need is deemed to be adequate. On the other hand, the demand for technical training is growing, and Stafford Technical Center is constrained by current facility limitations. Both Neshobe and Otter Valley adjust staffing levels each year; the overall number of teachers has been reduced over the last few years.

Funding for education comes from a mix of state and local sources. A statewide property tax for education is collected and distributed according to the number of students per district and their demographic needs. The local share of funds is raised predominately through the local property taxes to cover tuition, special education, transportation and administration.

Recent property tax pressure has prompted the Legislature to take a renewed look at Act 60, which is the state's school-funding formula and administrative system in an effort to slow the rise in property tax rates. In Brandon, we have for some years now maintained a "common level of appraisal" of about 1.0, meaning that we get back from the state what we put in for education funds. This is likely to change if enrollment declines or remains steady.

Action steps - Community and Educational Facilities

- The Town should continue its appropriations to BARS, the library, and the Senior Center, as well as other worthy community organizations, in order to meet local needs and to provide a broad base of cultural and recreational activities to attract increased population, industry, businesses and to support tourism.

ENERGY

24. V.S.A. § 4382 (9) An energy plan, including an analysis of energy resources, needs, scarcities, costs and problems within the municipality, a statement of policy on the conservation of energy, including programs, such as thermal integrity standards for buildings, to implement that policy, a statement of policy on the development of renewable energy resources, a statement of policy on patterns and densities of land use likely to result in conservation of energy.

Overview of Vermont Energy Goals

The State of Vermont has adopted a set of ambitious energy goals through statute and the Comprehensive Energy Plan (CEP), which was last updated in 2016. To help communities reach the sustainable energy future envisioned by the CEP, the state's central goals include:

- Meeting 90% of Vermont's total energy needs with renewable sources by 2050.
- Reducing greenhouse gas emissions by the following amount:
    - 40% reduction below GHG levels in 1990 by 2030, and
    - 80% to 95% reduction below 1990 levels by 2050.

Overview of Brandon Energy Goals

- Decrease overall energy consumption through conservation and efficiency;
- Reduce reliance on fossil fuels and imported energy sources; and
- Develop renewable energy resources locally.

The purpose of the Brandon Enhanced Energy Plan is to conduct comprehensive energy planning at the local level while also achieving state energy goals – most importantly, the goal to have renewable energy sources meet 90% of the town's energy needs by 2050.

This in-depth energy planning helps ensure energy security for the Town of Brandon, while pursuing the economic opportunities inherent in conservation, energy efficiency and renewable energy initiatives, all the while protecting the beautiful environment in and around the town of Brandon.

Brandon recognizes that as conventional fuel resources dwindle, future resilience relies on lowering dependence on imported, non-renewable fuels, tapping local energy sources for enhanced self-reliance, and improving efficiency while maintaining a standard of living to which residents are accustomed.

A critical facet of improved efficiency will be a greater reliance on electricity to power everyday needs. Since electricity can be generated from renewable resources, and since electric-powered technologies such as heat pumps and electric vehicles are highly efficient, switching to electricity will help lower overall energy consumption while at the same time maintaining current lifestyles in Brandon.

According to the Vermont Comprehensive Energy Plan, growth in electricity consumption is expected to rise to 47% of all energy use by 2050. Though this major shift in energy use is substantial, there are opportunities to lower costs and bolster the local economy through a transformation of the energy sector, which currently costs Brandon more than $21 million a

year or $4,273 per person each year (U.S. Energy Information Administration estimates).

Since nearly all this energy sector-related money flows out of Brandon and Vermont, redirecting expenditures for electricity, space and water heating and transportation to local energy businesses and employers will keep more wealth in the community.

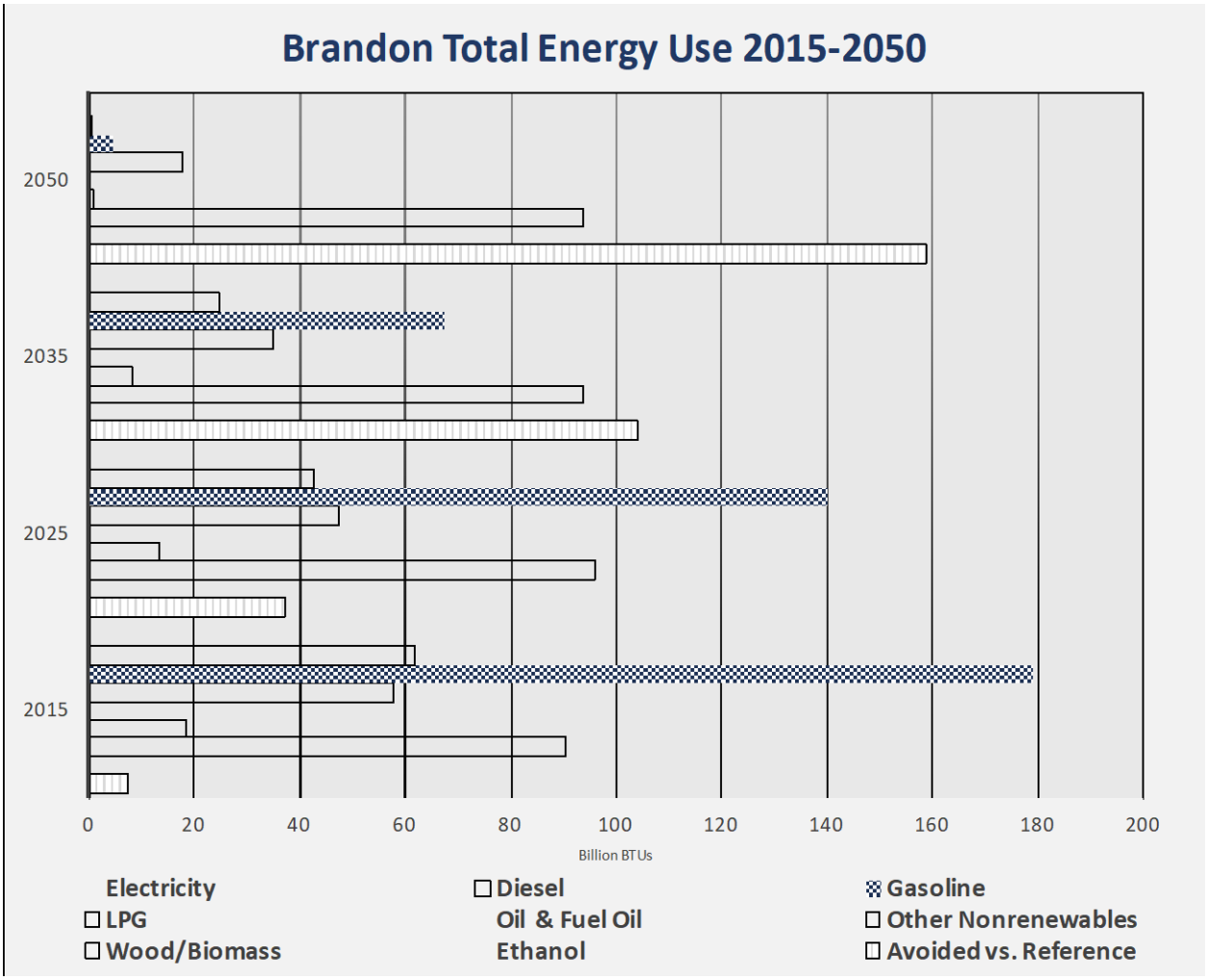
This energy plan is intended to provide the residents and local leadership of Brandon with the information and strategies needed to maintain a vibrant community in coming decades while the energy sector is transformed to better preserve the environment, lower energy costs, promote local renewable energy development, and enhance the town's self-reliance.

Current and Future Energy Use

The Rutland Regional Planning Commission Energy Plan (2018) estimates current and future regional energy consumption using a computer modeling program known as LEAP (Long Range Energy Alternatives Planning System) that is used around the globe and was developed for Vermont by the Vermont Energy Investment Corporation. Brandon's estimates are based on these projections.

The Town of Brandon uses nearly 704 Billion BTUs (British Thermal Units) per year and should aim to reduce consumption to almost a third of that or 261 Billion BTUs by 2050. The LEAP chart below shows the Town of Brandon's current energy use and the energy trajectory that the Town of Brandon should aim to achieve by 2050.

The LEAP model (below) also provides the "avoidance" amount, or the difference between the "reference scenario" and the "90x50 VEIC scenario" in total energy demand. Looked at another way, this avoided energy indicates how much weatherization, conservation, and greater efficiency needs to occur if Brandon is to meet the targets set in the LEAP model.



Energy use can be grouped into three major sectors: 1) transportation, 2) heating and cooling, and 3) electricity. Brandon's 1,661 households and 86 commercial entities consume significant amounts of energy for transportation and to power equipment, heat space and water, and power lights and appliances with electricity.

Brandon could see significant savings in energy consumption and costs by adopting conservation strategies, replacing outdated appliances and switching to more efficient technologies, and participating in weatherization programs.

By looking at consumption in three categories within these sectors – light-duty transportation, residential and commercial heating, and electricity use – a clearer picture emerges about what impact Brandon can have on overall energy use and in meeting Vermont's energy goals.

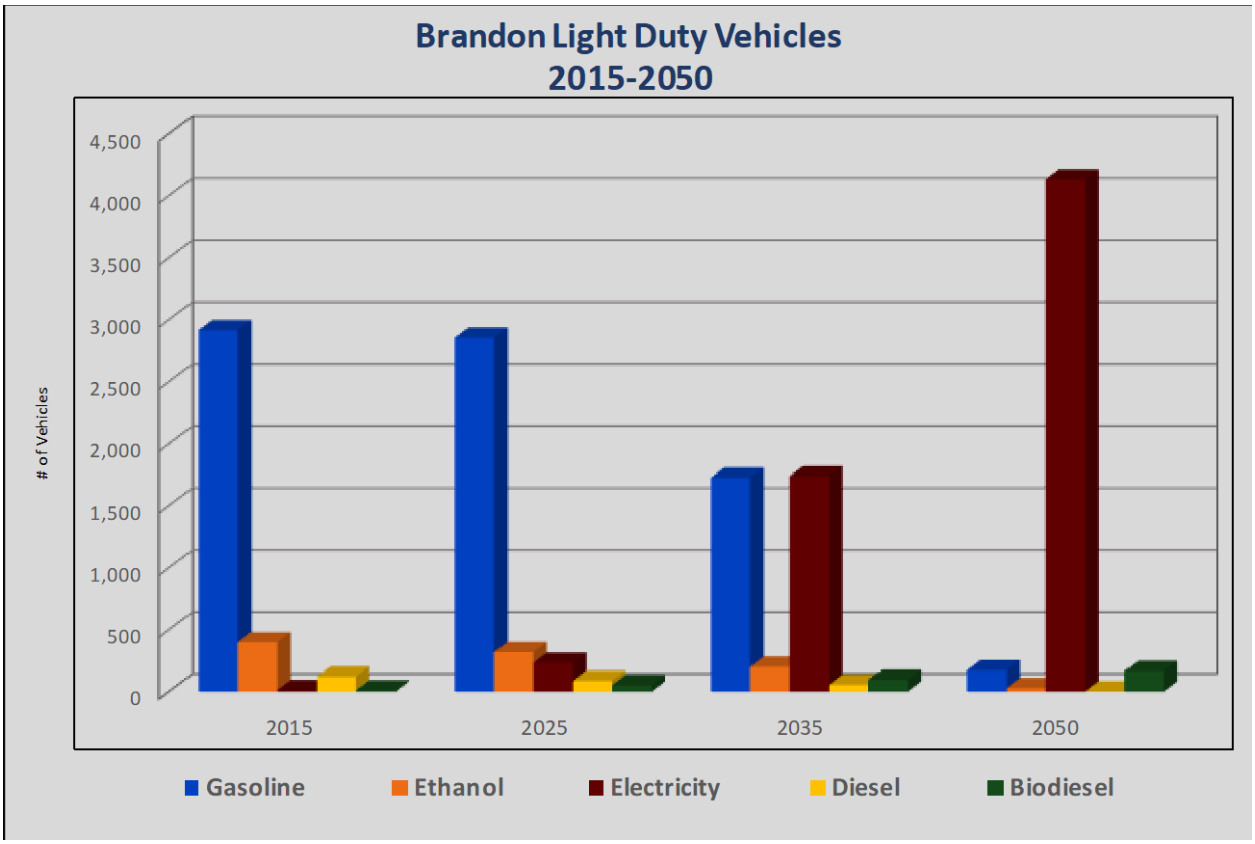
Transportation Energy Use

In Brandon, as in other municipalities in Vermont, transportation consumes the most energy of any sector. There are an estimated 2,813 light-duty vehicles in the town traveling 33.7 million

miles a year - at a cost of more than $4.2 million a year in gasoline alone. Of the 1,871 residents in the labor force, 1,511 (or 81%) drive to work alone.

In the next few decades, it's anticipated that total energy for transportation will fall gradually to about 35% of current levels for light-duty vehicles. The efficiencies of electrification and a switch to biodiesel will account for much of this reduction.

By 2050, electric and biodiesel vehicles are estimated to comprise 95% of the light-duty fleet in Brandon. It is expected that by 2050, there will be 4,135 electric and 166 biodiesel-powered light-duty vehicles in the town. By targeted year, this increase jumps dramatically from 9% of the fleet of light-duty vehicles in 2025 to 47% in 2035 to 95% in 2050.



Requiring more compact land use patterns is an excellent means for the town to reduce vehicle mileage and consumption of fuel. Brandon is committed to promoting multi-use land use (housing mixed with commercial) in future development. The town is also committed to reducing energy use in transportation and will lead by example by purchasing electric or biodiesel vehicles (when feasible), encouraging the use of public transit, offering more park-and-ride opportunities and installing EV charging stations.

Residential and Commercial Energy Use

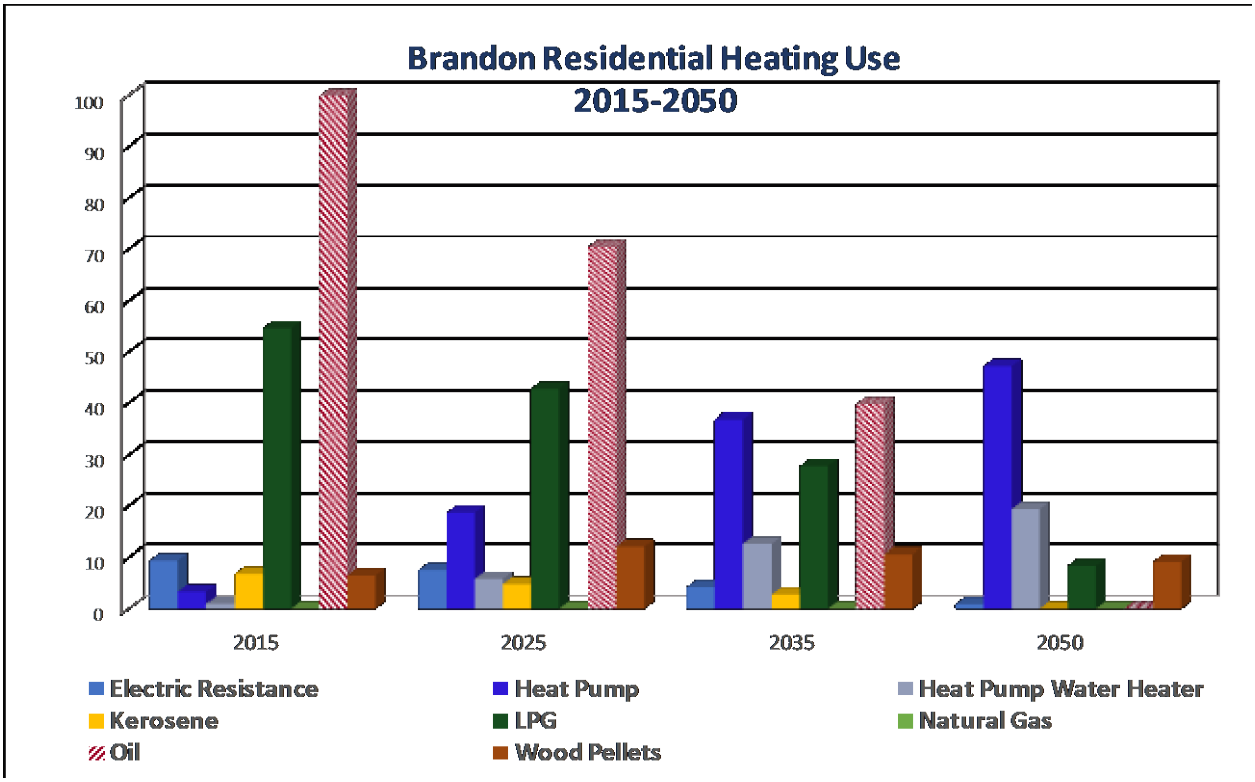
More than 81% of Brandon homes are heated with oil and other fossil fuels during the heating season. With the projected future shortage of fossil fuels, it will be in the town's best interest to

become less reliant on these sources of heating fuel and switch to efficient heating systems powered by local resources.

Brandon Residential Heating Energy Use (American Community Survey, US Census, 2011-2015)

Fuel	# of Households	% of Households	BTUs (in billions)
Natural Gas	33	2%	3
Propane	252	15.2%	22
Electricity	16	1%	1
Fuel Oil	1,053	63.4%	108
Coal	9	0.5%	1
Wood	269	16.2%	32
Solar	0	0%	0
Other	29	1.7%	3
No Fuel	0	0%	0
Total	1,661	100.0%	171

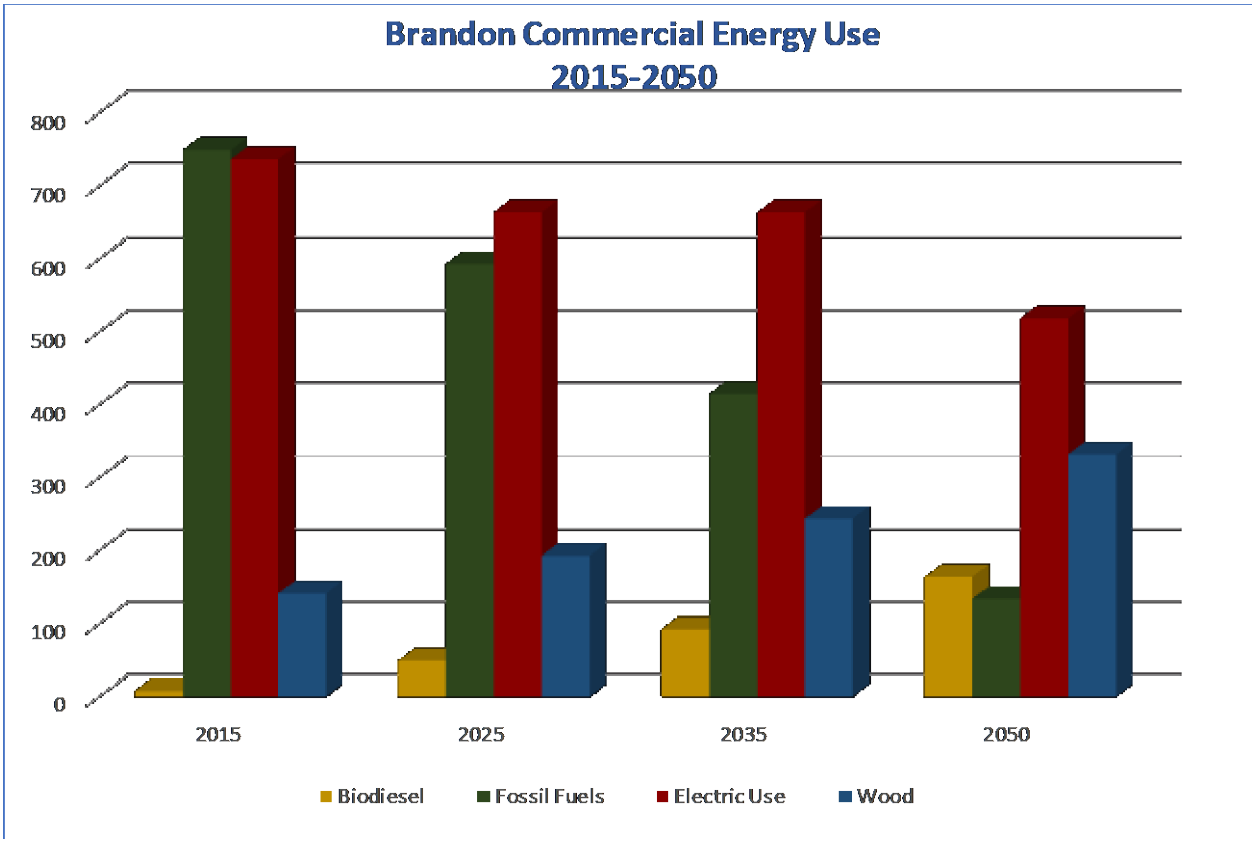
LEAP modeling shows how Brandon can make the transition to renewable energy sources for both residential and commercial structures through the increased use of bio-distillates and electricity. The use of fuel oil for heating drops precipitously in this modeling.



Residential Heating Goals		2025	2035	2050
Renewable BTUs		98.4	113	118.3
Non-Renewable BTUs		118	70.3	8.4

Brandon Commercial Heating Energy Use

Currently there is an estimated 86 commercial establishments using 0.725 Billion BTUs of thermal energy each, for a total of 68 Billion BTUs a year in Brandon. Energy use is projected to decrease 39 Billion BTUs due to a decreased use of fossil fuels and a heavier reliance on more efficient renewable sources such as biodiesel. Due to efficiencies, overall energy use declines, but as a percentage of overall energy use, electricity increases by 2050.



By switching fuels and relying on efficient heat pumps systems for both residential and commercial, the town's target is 170 units by 2025; 444 by 2035; and 862 by 2050. Conversions to new efficient wood heat systems are projected to increase from 16 units in 2025; then decrease by -17 in 2035; and by -30 in 2050 for both residential and commercial uses.

The projected growth in the percentage of heating energy use coming from renewable sources is sharp: rising from 52% in 2025 to 92% in 2050.

Brandon is committed to meeting its residential and commercial thermal targets through increased efficiency and conservation. The percentage of Brandon households that will need to be weatherized between now and 2050 to meet the state's goals is: 14% by 2025; 39% by 2035; and 85% by 2050. For commercial structures, weatherization targets are 29% by 2025; 47% by 2035; and 84% by 2050.

Electricity

Electricity, produced mostly by more expensive fossil fuel, is the third major sector of energy use so reducing usage and converting to renewable sources is critical to meeting the state's energy goals. Although electricity use will increase dramatically in the future since it is a conduit for making local renewable energy sources available for use, widespread adoption of efficient appliances, vehicles and thermal technologies powered by electricity is critical to achieving the state's energy goals for efficiency.

Brandon kWh Usage by Year (Efficiency Vermont)

Sector	2014	2015	2016
Commercial & Industrial	10,251,390	10,830,470	10,235,545
Residential	12,179,211	12,929,098	12,808,455
Total	**22,430,601**	**23,759,568**	**23,044,000**
Average Residential Usage	6,666	7,057	6,988

Data show that overall electrical use in Brandon is affected by electric efficiencies. Figures from Efficiency Vermont indicate that the town is seeing dramatic electric savings from efficiency measures, particularly in the commercial and industrial sectors. For instance, from 2014 to 2016, the commercial and industrial sectors went from saving 148,495 kWh to saving 1,033,048 kWh a year.

Further electricity efficiency savings are included in the LEAP modeling. The town's targets are 12.1% by 2025; 39% by 2035; and 69.8% by 2050. The MWh targets for the use of renewable sources for this electricity are 1,585 in 2025; 4,742 in 2035; and 14,369 in 2050.

Brandon is committed to energy conservation and will take advantage of Efficiency Vermont initiatives to upgrade the insulation of home and buildings to reduce heating and cooling energy consumption. The town also will lead by example by ensuring all municipal buildings, including the Town Office, fire stations, town garage, and schools, are audited for energy use and upgraded.

Development and Siting of Renewable Energy Sources

Renewable Type	MW	MWh
Solar	2.86	3414.3
Wind	0	0
Hydro	0	0
Biomass	0	0
Other	0	0
Total Existing Generation	2.86	3414.3

As of January 2019, Brandon has 2.86 MW of total renewable energy generation. The data in this table are based on information available from the Vermont Department of Public Service and the Vermont Community Energy Dashboard. The town currently has 100 solar sites and two biomass sites which includes Otter Valley Union High School and Neshobe School's wood pellet heating.

This chart below is the estimated renewable energy generation potential for the town. These data were based on mapping completed by the Rutland Regional Planning Commission (RRPC), which was based on the Municipal Determination Standards and associated guidance documents developed by the Vermont Department of Public Service.

Renewable Type	MW	MWh
Rooftop Solar	4	5,131
Ground-Mounted Solar	860	1,054,551
Wind (small scale)	784	1,567,420
Hydro	0	0
Biomass & Methane	0	0
Other	0	0
Total Renewable Generation Potential	1,648	2,627,102

RRPC has suggested the following targets (in MWh) for Brandon for total renewable energy generation to meet the state's 90x50 renewables goal. The target of 14,369 MWh by 2050 is a fraction of the town's generation potential of 2,627,102 MWh. The Brandon Energy Committee recognizes that the Town of Brandon is well on its way to meeting its 2050 target and has already met the 2025 target and pledges to continue this pace in order to meet or exceed the 2050 target.

Brandon Renewable Energy Targets (MWh)

2025	2035	2050
1,585	4,742	14,369

According to estimates by the RRPC, Brandon has sufficient land to reach 2050 targets for solar and wind based on the renewable generation potential in the town. For solar alone, there are 793.7 acres of prime solar which equates to 128,960 MWh of generation potential (793.7÷8=99.2x1,300=128,960).

The potential for energy generation is more than enough to meet the town's target (above). Even though Brandon has 3,134.85 acres identified as wind resources, much of that along ridgelines, developing these lands will not be needed to meet generation targets.

Brandon is maximizing its potential for renewable energy generation by identifying preferred areas for solar energy generation as well as adding more potential sites on impervious surfaces such as rooftops. The town is leading by example by already installing solar panels on its school rooftop and it is considering the addition of solar panels on other municipally-owned sites.

The Brandon Enhanced Energy Plan allows for the siting of all types of renewable generation

technologies, wind, solar, hydro and biomass energy generation, but not necessarily all scales of a given technology.

The town is certain that, if applied regionally, this is a fair and equitable approach that follows town and state priorities and still allows for sufficient land area to meet the town's and Vermont's energy targets and goals.

Brandon Planning Commission Criteria for Siting Renewable Energy

Below is the Town of Brandon's Planning Commission's process for reviewing potential large-scale solar and other renewable energy generation projects within Brandon, and further, how the Town plans influence state regulatory proceedings:

- Act 250 applications must conform to the municipal plan.
- Applications for a Section 248 Certificate of Public Good must give due consideration to the municipal plan; with an enhanced energy plan considered compliant, it has substantial deference.

For uniformity, Brandon adopts these standards used by the State of Vermont for system classifications and supports the RES standards developed by the State as well as other statutory requirements and Comprehensive Energy Plan (CEP) goals for emissions reduction and renewable generation:

- State goal of having 90% of all energy use -- transportation, thermal and electricity -- come from renewables by the year 2050.
- The RES for Vermont utilities requiring that 75% of electricity sold in Vermont in 2032 be obtained from renewables.
- State and local and property tax statutes.
- 15 kW or less as the definition of small residential systems.
- Access requirement to firefighters and other emergency responders.

Furthermore, every renewable energy project larger than 15 kW shall include a proposed site plan, a statement of compliance with all known and possible constraints, a project budget and scope, a qualified assessment by an energy professional as to the viability of the project, an action plan and a guaranteed funding source for decommissioning to ensure the site is safe, stable and free of structures and hazardous materials.

The following questionnaire will be sent to companies considering construction of renewable energy projects in/around the Town of Brandon (see appendix for proper form).

1. Owner information
   A. Owner intends to construct a __ kW (sites >15kW need to fill out the form below; the form is not necessary for sites <15kW) at the following address or legal description (system site):
   B. This site is on (circle one):
      - Public Land
      - Private land

C. Is this a residential or commercial installation?
D. This site does or does not require local permits or improvements in public roads/infrastructure improvements to access/operate the installation? If yes, please describe.
E. Has owner secured rights to use the above-mentioned site?
F. Please describe what benefits this project would bring to the Brandon community.
G. This installation will be (circle one):

- net metered
- grid tied

H. If net metered who will be receiving the generation credits?
I. If this is a secure or restricted access site, how will security be handled? Will emergency personnel be able to access this site?
J. Who owns the RECs (Renewable Energy Credits)? Will the RECs be sold?

The Town of Brandon has identified a list of preferred sites below that offer potential renewable energy investments in areas that avoid the known and possible constraints. This list is a proactive approach to help make investments in the district and enable Brandon to meet the local and state goals of renewable energy generation by 2050. The town has made investments in utilities to support residential and higher density population areas. A commercial project that would not make use of those utility services would limit the town's ability to recover utility investments.

2. Known and Possible Constraints

A. There are state and regional constraints on locating renewable energy installations. Please indicate if this site does or does not conflict with these known or possible constraints.

1. *Known Constraints: vernal pools; DEC river Corridors; FEMA floodways; State-significant Natural Communities and Rare, Threatened and Endangered species areas; National Wilderness Areas; Class 1 and Class 2 wetlands.*
2. *Possible Constraints: Agricultural soils; FEMA Special Flood Hazard Areas; Protected lands (state fee lands and private conservation lands); Act 250 Agricultural Soil Mitigation Areas; Deer wintering areas; ANR's Vermont Conservation Design Highest Priority Forest Blocks; Hydric soils.*

B. The Town of Brandon has preferences based on the above-mentioned list. Please include a site plan that shows location of renewable energy project in relation to the parcel boundaries, the converters and necessary power infrastructure to access the grid from this location. Indicate what utilities or services would be required by the City.

Brandon infrastructure and population density plans strive to concentrate residential growth to limit the impact of service infrastructure required. Any commercial proposals within these targeted population centers would need to be weighed against the future use of these spaces for population and municipal needs. Project will need to follow existing zoning procedures and practices.

3. Project details

A. Type of generation:
B. Expected kW/kWh annual generation:
C. Is this a project that might be done in phases?
D. Are there any other phases planned for this site in the future?
E. Zoning variance required?
F. If located on public land, are public approvals required?
G. Expected construction start date:
H. Expected completion date:
I. Expected site maintenance plan:
J. Town of Brandon project timeline:

- Completed review by developer and town manager and planning commission
- Pre-construction site visit
- Final visit after PUC certificate of good issued and review of scope of project changes
- Midpoint construction visit
- Final preoperational visit
- Annual operational visits (to ensure best possible service to investors, the Town of Brandon will request economic and energy updates from the company on an annual basis)

4. References and Tools:

- The Vermont Community Energy Dashboard: https://www.vtenergydashboard.org/
- VT Energy Dashboard (Brandon's baseline): https://www.vtenergydashboard.org/my-community/brandon/progress
- The Renewable Energy Atlas: https://www.vtenergydashboard.org/energy-atlas. This is a helpful tool for communities and people interested in exploring and identifying energy projects, known or possible constraints, and sites best suited for renewable energy deployment. Search for Brandon and find the energy resources deployed and select Layers on the right-hand side of the Atlas to see the Act 174 constraints.
- Vermont energy committees network: https://vecan.net/

Mapping and Managing Resources

Known Constraints
High priority constraints that limit where energy can be generated.

Energy generation facilities are not very likely to be developed in Known Constraints areas due to the presence of natural resources that are regulated at the federal, state or local level. Accordingly, these constraints have been removed from the raw resource potential mapping layers. Site-specific study, by the town manager and the town planning commission, is required to ascertain whether one of the mapped constraints truly exists on the site and some sites not captured by the Known Constraints mapping may have such high-priority constraints, depending on the results of site-specific study. The maps are good indicators, but not definitive siting tools. Included:

- Vernal Pools

- DEC River Corridors
- FEMA Floodways
- State-significant Natural Communities and Rare, Threatened, and Endangered Species
- National Wilderness Areas
- Class 1 and Class 2 Wetlands

Possible Constraints
Lower priority constraints that may limit where energy can be generated.

Possible constraints can impact the siting process for generation facilities and should always be considered in planning for these facilities, but do not necessarily preclude placement in corresponding areas. Site-specific solutions are often possible when one of these conditions exists. Site-specific study, by the town manager and town planning commission, is required to ascertain whether one of the mapped constraints truly exists on the site and some sites not captured by the Possible Constraints mapping may have such lower priority constraints, depending on the results of site-specific study. The maps are good indicators, but not definitive siting tools. Included but not limited to:

- Agricultural soils (prime farmland, additional farmland of statewide importance, and additional farmland of local importance)
- FEMA Special Flood Hazard Areas
- Protected Lands (State fee lands and private conservation lands)
- Act 250 Agricultural Soil Mitigation Areas
- Deer Wintering Areas
- ANR's Vermont Conservation Design Highest Priority Forest Blocks (Habitat Blocks 9 & 10)
- Hydric Soils

Local Constraints (see map below)
Areas where Brandon discourages renewable energy generation.

In addition to the known and possible state/regional constraints mentioned above, see Brandon Town Plan (see *Natural Resources* section on pages 47-48), which includes a statement of policies on the preservation of rare and irreplaceable natural areas.

The Town of Brandon has an abundance and variety of valuable natural resources. The environment has played an important role in shaping Brandon's image and provides a continuing public and economic benefit to the community. Economic activities dependent on natural resources, including agriculture and forestry, are described in the Town Plan with policies related to their use and conservation.

In 2019, the Town of Brandon will undertake a community-wide viewshed analysis, to determine which scenic resources it's keen to protect from development. Once that list of scenic resources is generated and included as an appendix to this plan, all proposed renewable energy generation development in these scenic resource areas shall have site specific aesthetic impact analyses completed by a certified landscape professional and paid for by the developer.

Site specific aesthetic analyses will determine whether a proposed generation project will have an undue adverse effect on aesthetics, historic sites, air and water quality, the natural environment, the use of natural resources, and public health and safety.

The Town of Brandon desires to protect its most important landscapes (to be identified as scenic resources or "viewsheds" and eventually listed in its Municipal Plan). In the meantime, all proposed projects, as with other non-energy generation land use, should have a comparable or less of a negative impact on Brandon's pastoral and scenic views of mountains, ridges, and valleys.

Prime Resource Areas
Areas with high resource potential and no identified constraints (Known or Possible).

Secondary Resource Areas
Areas with high resource potential and no Known Constraints, but where at least one Possible Constraint exists.

Wind Resource Areas (see map below)
Areas where there is likely to be sufficient wind at specified heights for utility scale wind energy development.

The analysis used digital wind speed at various heights (30, 50, and 70 meters) and identified areas with the highest wind speeds at each of those heights. The mapping also considers various other conditions, such as ecological zones that may impact the feasibility of renewable energy development. These conditions are known as constraints. The strongest wind resources are generally located at higher elevations and that is where the state's utility-scale installations are located. But Vermont does have nearly 200 small-scale wind projects ranging from 0.95 kW to 100 kW of generating capacity.

Brandon has decided not to include utility scale wind (greater than 1 MW) in its renewable energy generation targets. Instead of looking at the areas identified on the wind resource map, the town envisions residential scale and commercial scale turbines or windmills in areas throughout Brandon.

This scale of wind generation is referred to as Distributed Wind. Small Distributed Wind turbines can range from 1kW to 100kW (located at homes and farms). Medium turbines range from 101kW to 1MW (at manufacturing plants, schools or other institutions).

Due to anticipated technological advances, small and medium scale wind generation is projected to be feasible throughout most of the town at lower elevations in coming decades.

Brandon is not saying "no" to wind generation. Instead, following town land use policy, it would be most appropriate if small scale and commercial systems were encouraged at low elevations and on towers preferably not to exceed 150 feet in height since most of the identified wind resources are in residential areas of the town.

Solar Resource Areas (see map below)
Areas where there is likely to be sufficient solar radiation for solar energy development (solar photovoltaic or PV).

Brandon is projected to meet its renewable energy generation target with mostly non-utility and non-Standard Offer Program scale solar (≤ 500 kW). Because of the rapid pace of technological advances in the field of PV solar, it is expected that residential, commercial and industrial scale projects will dominate the region's solar generation by 2050.

The GIS-based analysis factored in direction, slope and location of land to mapped areas with high solar radiation potential. Certain areas where development was not possible – such as rivers and roads – were removed. The mapping also considers various other conditions, such as ecological zones that may impact the feasibility of renewable energy development. These conditions are known as constraints. The Town encourages the following when considering solar:

Community Solar: Community solar is a solar PV generation system that provides electricity, net metering, and return on investment to multiple participants. A community solar project—referred to as a solar farm, garden or shared renewable energy plant—is a solar power plant whose electricity is shared by more than one household. Participants subscribe to a portion of the energy produced in the community solar project, along with other residents (or investors). It could be a viable option for some of Brandon's neighborhoods and businesses.

Screening for Solar: Screening can be natural vegetation and helps block solar arrays from roadside viewing. To keep wildlife corridors open, fencing is not always required. There is precedent in Vermont for non-fenced solar arrays; the posts supporting solar panels are specially protected so that they're not safety hazards.

Setbacks for Solar: Brandon endorses the minimum setbacks required for ground-mounted solar generation facilities as enumerated in 30 VSA §248(s). See below:

Minimum Setbacks for Solar	
From a state or municipal highway	100 feet for capacity exceeding 150 kW; 40 feet for capacity between 15 and 150 kW
From each property boundary that is not a state or municipal highway	50 feet for capacity exceeding 150 kW; 25 feet for capacity between 15 and 150 kW

Impervious Services for Solar: Solar generation facilities of a capacity less than 150 kW are highly encouraged throughout the town, especially on residential and commercial rooftops. Using the analysis provided in the Vermont Department of Public Service Guidance (2017),

the 665.12 acres of impervious surface within one mile of existing 3-Phase power lines, can provide more than 83 MW of energy (552.8/ 8 acres per MW = 83.14 MW). The mapping analysis showed that there are 801 acres of impervious surfaces in the town not including residential rooftops. This should be more than enough area to accommodate small scale solar and meet the town's renewable energy generation target. If the town were to rely only on solar energy generation (just one scenario), it would need just 11.72 MW to meet its municipal renewable generation goal (11.72 MW = 14,369 MWh). As much as 3.3 MW of solar energy that could be generated on residential rooftops: (1,661 homes / 25%) x 4 kW) using a methodology developed by the Bennington Regional Planning Commission.

Hydro Resource Areas (see map below)
Areas where there is likely to be capacity to accommodate hydroelectric energy development.

The mapping shows areas of potential electricity generation from hydro; locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. Existing, powered and existing non-powered dam sites where a generator could be installed or existing hydropower sites where equipment could be upgraded or expanded to provide additional generation (with potential production) were mapped.

The mapping also considers various other conditions, such as ecological zones that may impact the feasibility of renewable energy development. These conditions are known as constraints.

It is important to note that there is considerable time and expense involved with permitting hydropower projects, which are reviewed at the federal level.

Biomass Resource Areas (see map below)
Areas where there is likely to be sufficient biomass resources for biomass energy development.

The mapping shows areas of potential electricity generation from biomass totaling 3,918 acres of prime and secondary biomass resource - locations with high woody biomass potential and where renewable energy generation would likely be most feasible according to the natural conditions of an area.

The mapping also considers various other conditions, such as ecological zones that may impact the feasibility of renewable energy development. These conditions are identified as Known and Possible Constraints in the maps' legends.

Preferred Areas (see map below)
Areas where Brandon encourages solar energy generation.

As mentioned earlier in this plan, solar generation facilities with a capacity of less than 150 kW are highly encouraged throughout Brandon, especially on residential and commercial rooftops. The town also has selected the following preferred areas for the potential use as utility and Standard Offer Program scale solar (≥ 500 kW):

Parcel ID	Grand List ID	Total Acres
06-01-08.01	0079-2085	21.52 acres
04-01-19	0101-0182	12.28 acres
02-01-16	0001-0520	42.82 acres
Totals:		**76.62 acres**

This acreage, plus the 2.8 MW of solar already installed in Brandon, gives the town the potential of 16,120 MWh of renewable energy, which is more than its target of 14,369 MWh. It also does not include several large commercial solar developments that are being proposed in the town which would add to the total of MWh**.**

Department of Public Service Preferred Areas
Where applicable, parcels containing any of these state-preferred areas for renewable energy generation:

- roof-mounted systems
- former brownfield sites
- disturbed areas such as gravel or sand pits
- sealed and sanitary landfills and former quarries and mineral extraction sites
- junk yards
- parking lots
- parking lot canopies over paved parking lots
- previously developed sites
- brownfields and Superfund sites
- areas adjacent to large-scale commercial or industrial buildings
- areas where topographical features or vegetation naturally screen a site from common view

There are an estimated 801 acres of state-defined impervious surfaces in Brandon which is 100 MW/130,000 MWh of potential energy generation that could be added using a solar conversion.

Grid Infrastructure (see map below)
Current Green Mountain Power grid infrastructure.

Another key element of the Resource Maps is the location of electric grid infrastructure, including three-phase and other high-capacity distribution lines. The location of transmission and distribution infrastructure was not specifically factored into the mapping analysis or the development of energy generation goals at the regional scale. However, grid infrastructure location and capacity will play a vital role in determining the economic feasibility and timetable for

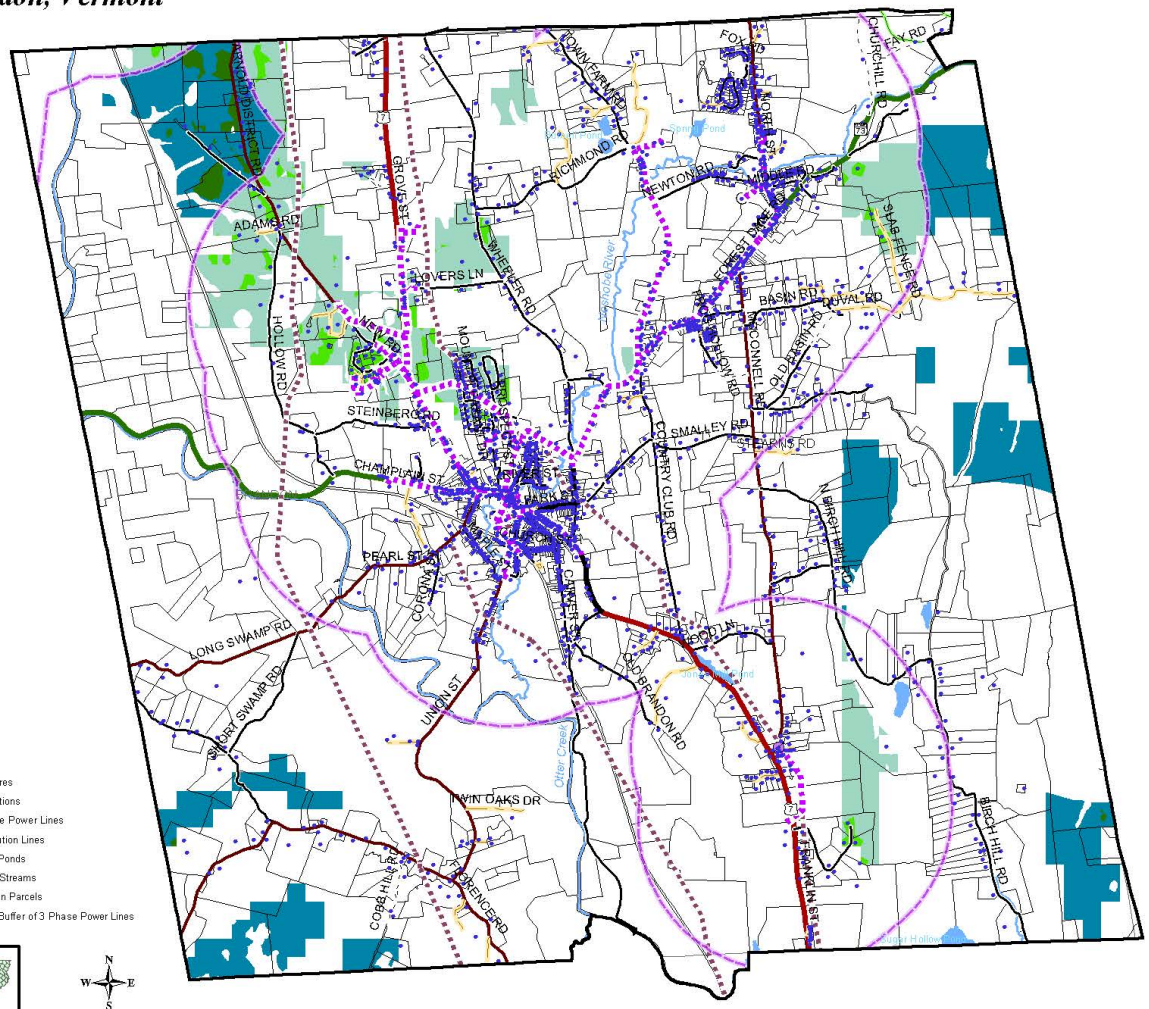
development of a certain site for a renewable energy generation facility.

For more detailed information on grid infrastructure and capacity, Green Mountain Power's "Solar Map" shows the specific capacity of each section of the utility's grid. Red distribution lines indicate there is less than 10% capacity remaining; yellow lines show 10-20% capacity remaining; and green lines indicate more than 20% capacity remaining.

WIND ENERGY POTENTIAL

Based on Public Service Department Requirements

Brandon, Vermont



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Methodology

This map shows areas of potential electricity generation from wind, i.e. locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. This map also considers various other conditions, such as ecological zones, that may impact the feasibility of renewable energy development. These conditions are referred to as constraints. Areas of prime wind potential exist where the natural conditions make development feasible and no Known or Possible constraints exist, as determined by the Vermont Public Service Board.

Known Constraints

Areas with conditions that are likely to be hazardous or encounter significant obstacles to development, and therefore are very likely to make renewable energy generation development unfeasible, are considered Known constraints. These areas have been removed and are not shown in any way on this map.
Known constraints include:
FEMA floodways,
DEC River Corridors,
Federal Wilderness Areas,
Rare and irreplaceable Natural Areas (RINAs),
Vernal Pools,
Wetlands Class 1 and 2.

Possible Constraints

Areas that may pose some obstacle to development, but where development is still likely to be feasible, are considered Possible Constraints. These areas ARE shown on the Map, wherever they overlap an area that has potential for solar development. The map only shows where these conditions overlap an area that otherwise has potential for renewable energy development.
Possible Constraint include:
Deer Wintering Areas
Public water sources, a 200 foot buffer added around the well head.
FEMA Special Flood Hazard Areas
Hydric Soils
VT Agriculturally Important Soils (prime, statewide and local classifications).
Act 250 Agricultural Soil Mitigation areas
Protected Lands (State fee lands and private conservation lands)
Habitat Blocks only includes areas of 2,000 acres or greater of contiguous forest and other natural habitats that are unfragmented by roads, development, or agriculture.
ANR's Vermont Conservation Design Highest Priority Forest Blocks (Habitat Blocks 9 & 10),
Regionally or Locally Identified Critical Resources

Legend

Prime Wind, w/in 1 mile of 3 Phase power lines.

Prime Wind

Areas with high wind potential and no identified constraints (known or possible).

Secondary Wind, w/in 1 mile of 3 Phase power lines.

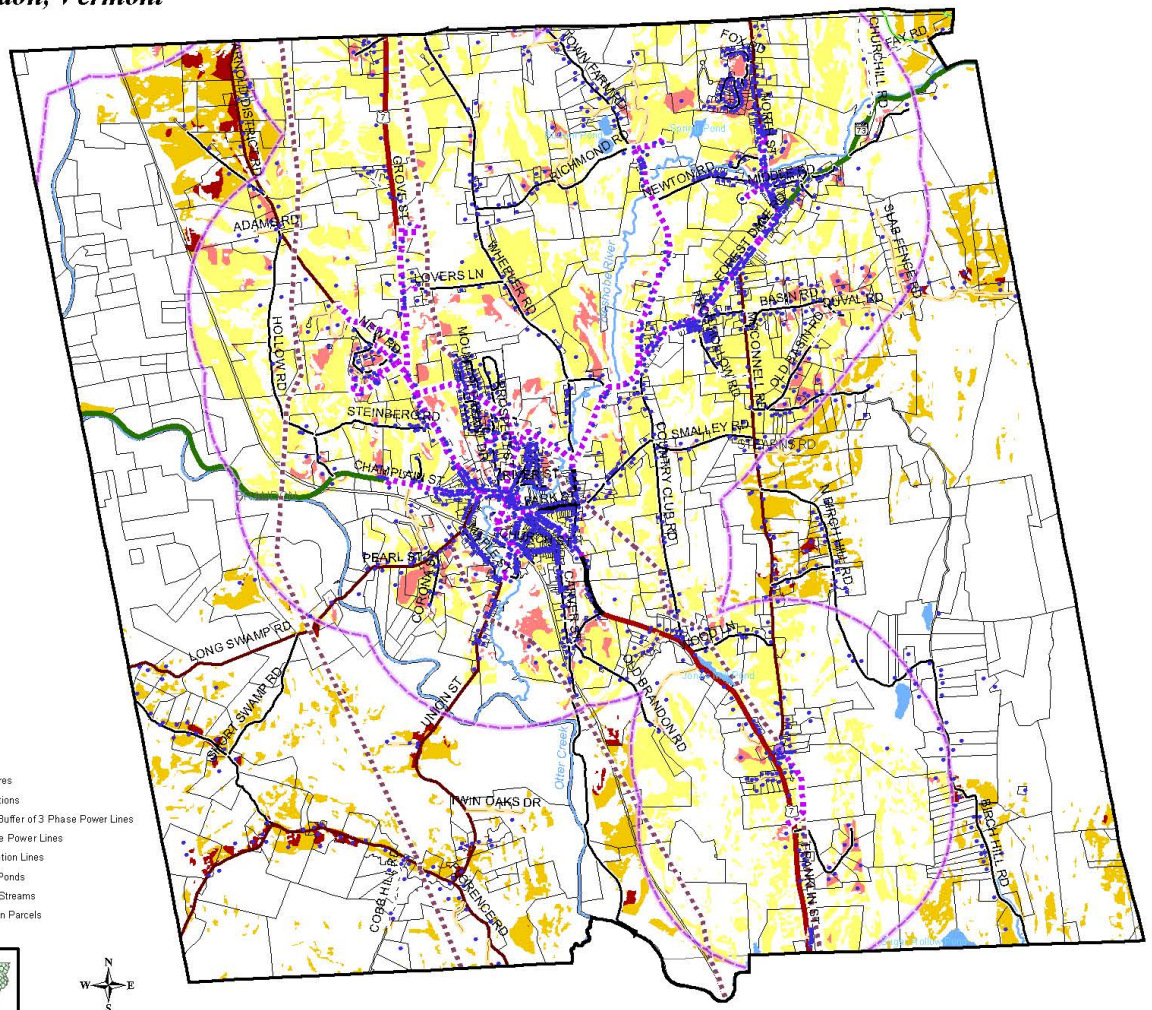
Secondary Wind

Areas with high wind potential and no known constraints, but where at least one possible constraint exists.

SOLAR ENERGY POTENTIAL

Based on Public Service Department Requirements

Brandon, Vermont



Legend

- Structures
- Substations
- 1 Mile Buffer of 3 Phase Power Lines
- 3 Phase Power Lines
- Distribution Lines
- Lakes/Ponds
- Rivers/Streams
- Brandon Parcels

N W E S

May 6, 2019

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Miles

0 0.25 0.5 1 1.5 2

Setbacks

Under H.40, passed in 2015, minimum setback requirements for in-state, ground mounted solar generation facilities approved under Section 248 are:
From a state or municipal highway - 100 feet for a facility with a plant capacity exceeding 150 kilowatts and 40 feet for a plant capacity between 15 and 150 kilowatts.
From each property boundary that is not a state or municipal highway - 50 feet for a facility with a plant capacity exceeding 150kilowatts and 25 feet for a facility with a capacity between 15 and 150 kilowatts.

Methodology

This map shows areas of potential electricity generation from solar, i.e. locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. This map also considers various other conditions, such as ecological zones, that may impact the feasibility of renewable energy development. These conditions are referred to as constraints. Areas of prime solar potential exist where the natural conditions make development feasible and no Known or Possible constraints exist, as determined by the Vermont Public Service Board.

Known Constraints

Areas with conditions that are likely to be hazardous or encounter significant obstacles to development, and therefore are very likely to make renewable energy generation development unfeasible, are considered Known constraints. These areas have been removed and are not shown in any way on this map.
Known constraints include:
FEMA floodways,
DEC River Corridors,
Federal Wilderness Areas,
Rare andl irreplaceable Natural Areas (RINAs),
Vernal Pools,
Wetlands Class 1 and 2.

Possible Constraints

Areas that may pose some obstacle to development, but where development is still likely to be feasible, are considered Possible Constraints. These areas ARE shown on the Map, wherever they overlap an area that has potential for solar development. The map only shows where these conditions overlap an area that otherwise has potential for renewable energy development.
Possible Constraint include:
Deer Wintering Areas
Public water sources, a 200 foot buffer added around the well head.
FEMA Special Flood Hazard Areas
Hydric Soils
VT Agriculturally Important Soils (prime, statewide and local classifications).
Act 250 Agricultural Soil Mitigation areas
Protected Lands (State fee lands and private conservation lands)
Habitat Blocks only includes areas of 2,000 acres or greater of contiguous forest and other natural habitats that are unfragmented by roads, development, or agriculture.
ANR's Vermont Conservation Design Highest Priority Forest Blocks (Habitat Blocks 9 & 10).
Regionally or Locally Identified Critical Resources

Legend

Prime Solar, w/in 1 mile of 3 Phase power lines.

Prime Solar

Areas with high solar potential and no identified constraints (known or possible).

Secondary Solar, w/in 1 mile of 3 Phase power lines.

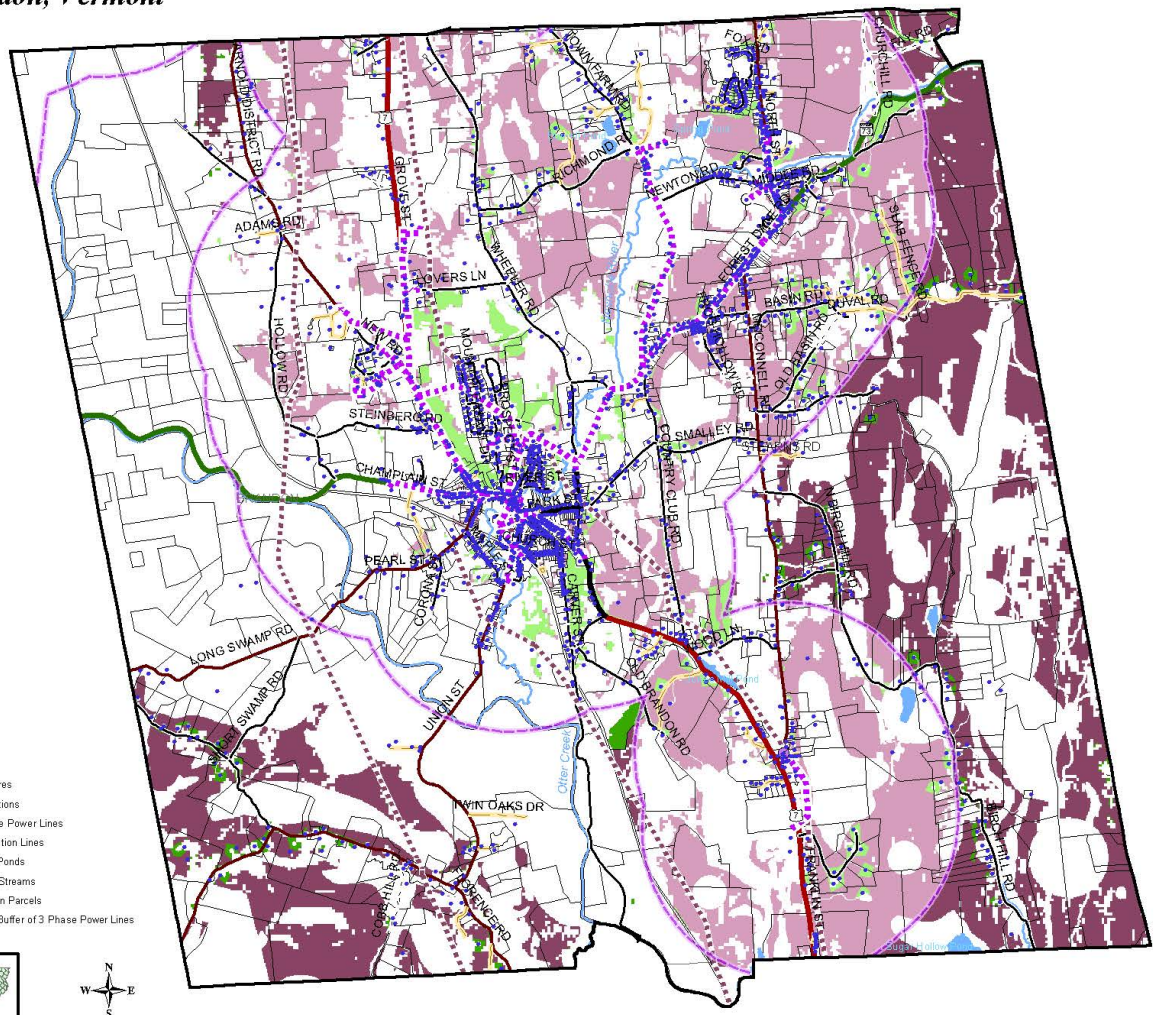
Secondary Solar

Areas with high solar potential and no known constraints, but where at least one possible constraint exists.

BIOMASS ENERGY POTENTIAL

Based on Public Service Department Requirements

Brandon, Vermont



Legend

- Structures
- Substations
- 3 Phase Power Lines
- Distribution Lines
- Lakes/Ponds
- Rivers/Streams
- Brandon Parcels
- 1 Mile Buffer of 3 Phase Power Lines

N W E S

May 6, 2019

Miles

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Methodology

This map shows areas of potential electricity generation from biomass, i.e. locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. This map also considers various other conditions, such as ecological zones, that may impact the feasibility of renewable energy development. These conditions are referred to as constraints. Areas of prime biomass potential exist where the natural conditions make development feasible and no Known or Possible constraints exist, as determined by the Vermont Public Service Board.

Known Constraints

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FEMA floodways,
DEC River Corridors,
Federal Wilderness Areas,
Rare andl irreplaceable Natural Areas (RINAs),
Vernal Pools,
Wetlands Class 1 and 2.

Possible Constraints

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Public water sources, a 200 foot buffer added around the well head.
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Hydric Soils
VT Agriculturally Important Soils (prime, statewide and local classifications).
Act 250 Agricultural Soil Mitigation areas
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ANR's Vermont Conservation Design Highest Priority Forest Blocks (Habitat Blocks 9 & 10),
Regionally or Locally Identified Critical Resources

Legend

- Prime Woody Biomass, w/in 1 mile of 3 Phase power lines.
- Prime Woody Biomass

Areas with high woody biomass potential and no identified constraints (known or possible).

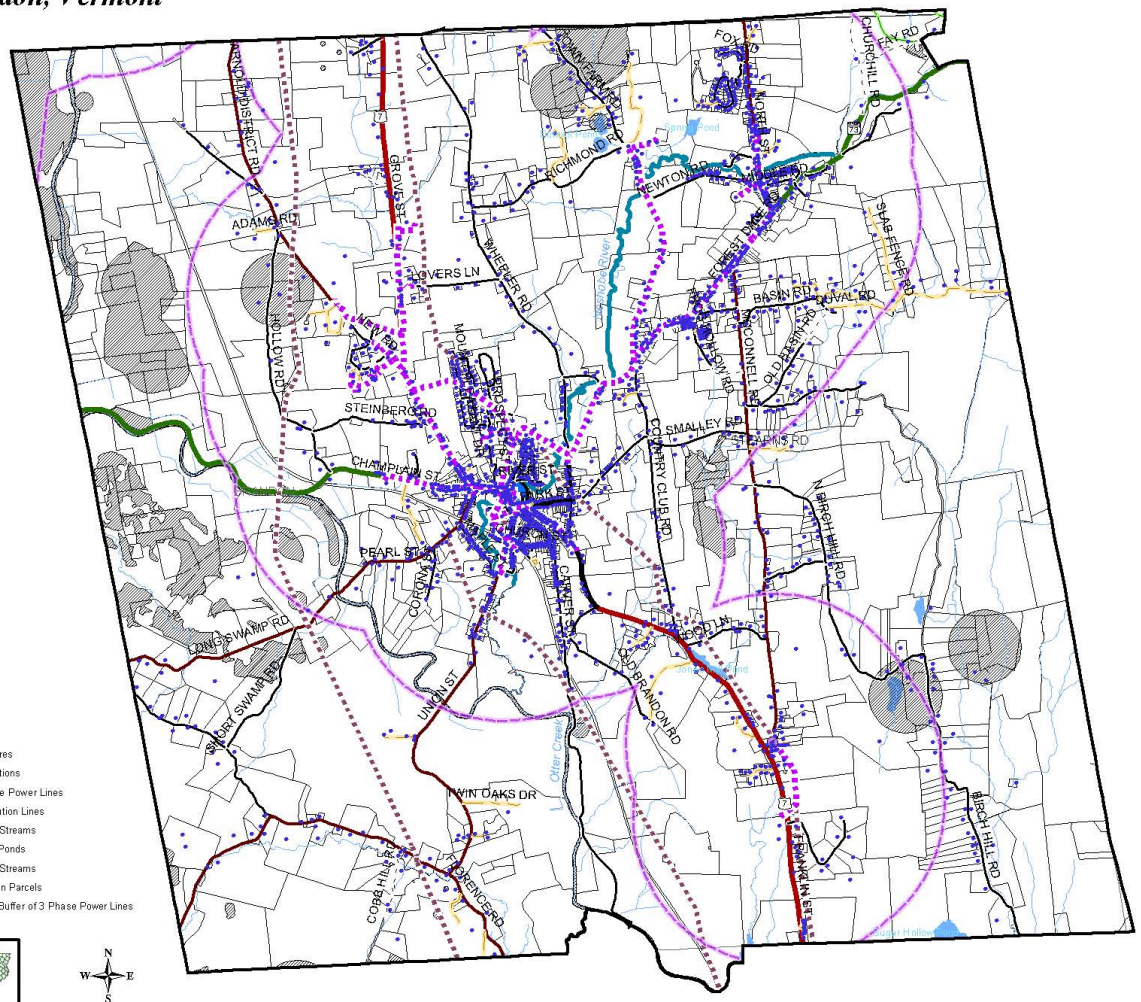
- Secondary Woody Biomass, w/in 1 mile of 3 Phase power lines.
- Secondary Woody Biomass

Areas with high woody biomass potential and no known constraints, but where at least one possible constraint exists.

HYDRO ENERGY POTENTIAL

Based on Public Service Department Requirements

Brandon, Vermont



Legend

- Structures
- Substations
- 3 Phase Power Lines
- Distribution Lines
- Rivers/Streams
- Lakes/Ponds
- Rivers/Streams
- Brandon Parcels
- 1 Mile Buffer of 3 Phase Power Lines

N W E S

May 6, 2019

Miles

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Methodology

This map shows areas of potential electricity generation from hydro, i.e. locations where renewable energy generation would likely be most feasible according to the natural conditions of an area. This map also considers various other conditions, such as ecological zones, that may impact the feasibility of renewable energy development. These conditions are referred to as constraints. Areas of prime hydro potential exist where the natural conditions make development feasible and no Known or Possible constraints exist, as determined by the Vermont Public Service Board.

Known Constraints

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FEMA floodways,
DEC River Corridors,
Federal Wilderness Areas,
Rare and Irreplaceable Natural Areas (RINAs),
Vernal Pools,
Wetlands Class 1 and 2.

Possible Constraints

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Hydric Soils
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Act 250 Agricultural Soil Mitigation areas
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ANR's Vermont Conservation Design Highest Priority Forest Blocks (Habitat Blocks 9 & 10),
Regionally or Locally Identified Critical Resources

Legend

- Dams not on National Wild and Scenic Rivers

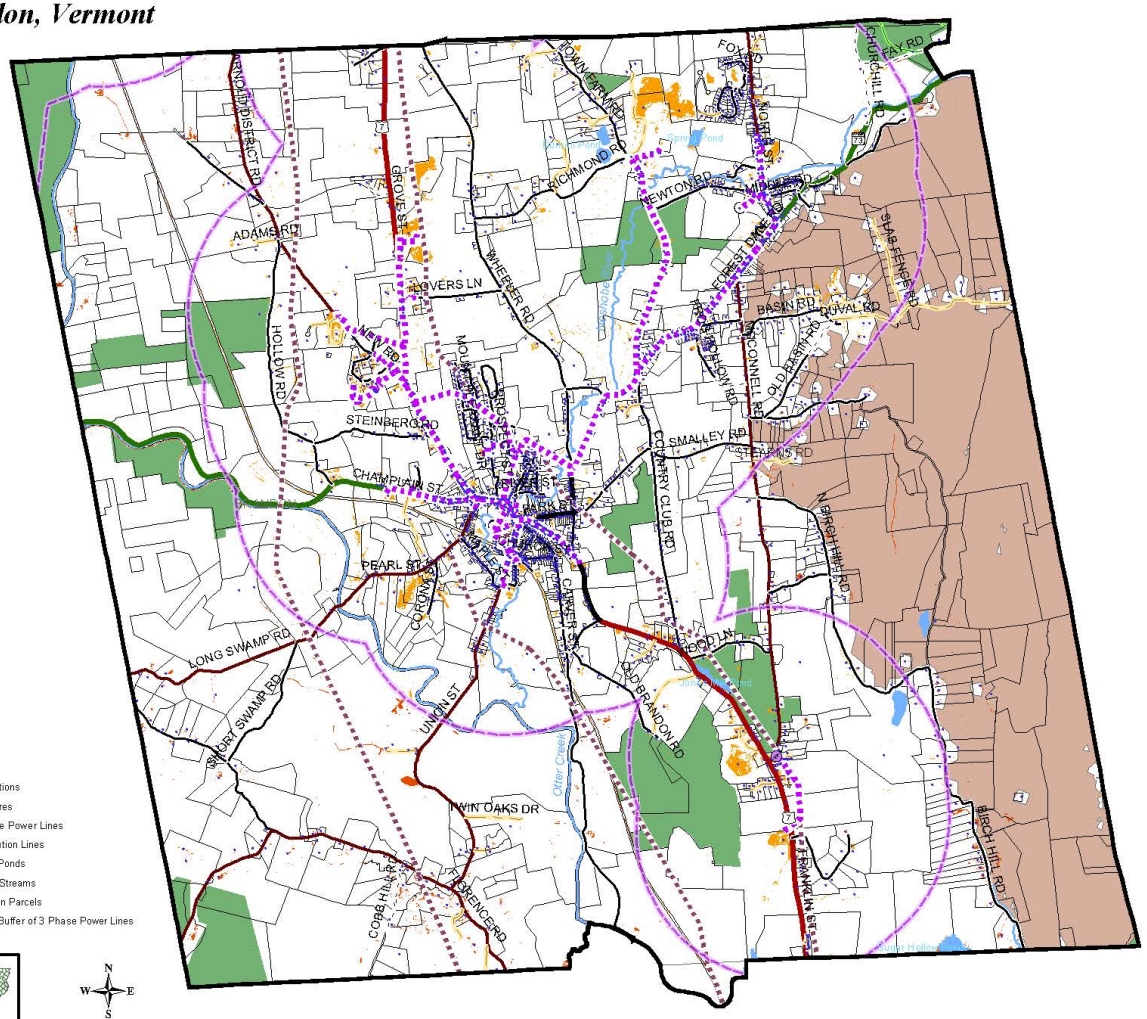
Potential Hydroelectric Facilities

- < 50 kW Capacity
- > 50 kW Capacity
- High Hazard with < 50 kW Capacity
- High Hazard with > 50 kW Capacity
- Impaired Waters
- Stressed Waters
- Rivers/Streams
- Designated Outstanding Resource Waters
- Rare and Irreplaceable Natural Areas (RINAs)

LOCAL CONSTRAINTS

Based on RRPC Energy Committee

Brandon, Vermont



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ANR's Vermont Conservation Design Highest Priority Forest Blocks (Habitat Blocks 9 & 10),
Regionally or Locally Identified Critical Resources

Legend
- Impervious Surface (preferred locations for solar only, within 1 mile of 3 Phase Power)
- Impervious Surface (preferred locations for solar only)
- Habitat Blocks 9 and 10
- Conserved Lands

Legend
- Substations
- Structures
- 3 Phase Power Lines
- Distribution Lines
- Lakes/Ponds
- Rivers/Streams
- Brandon Parcels
- 1 Mile Buffer of 3 Phase Power Lines

N W E S

May 6, 2019

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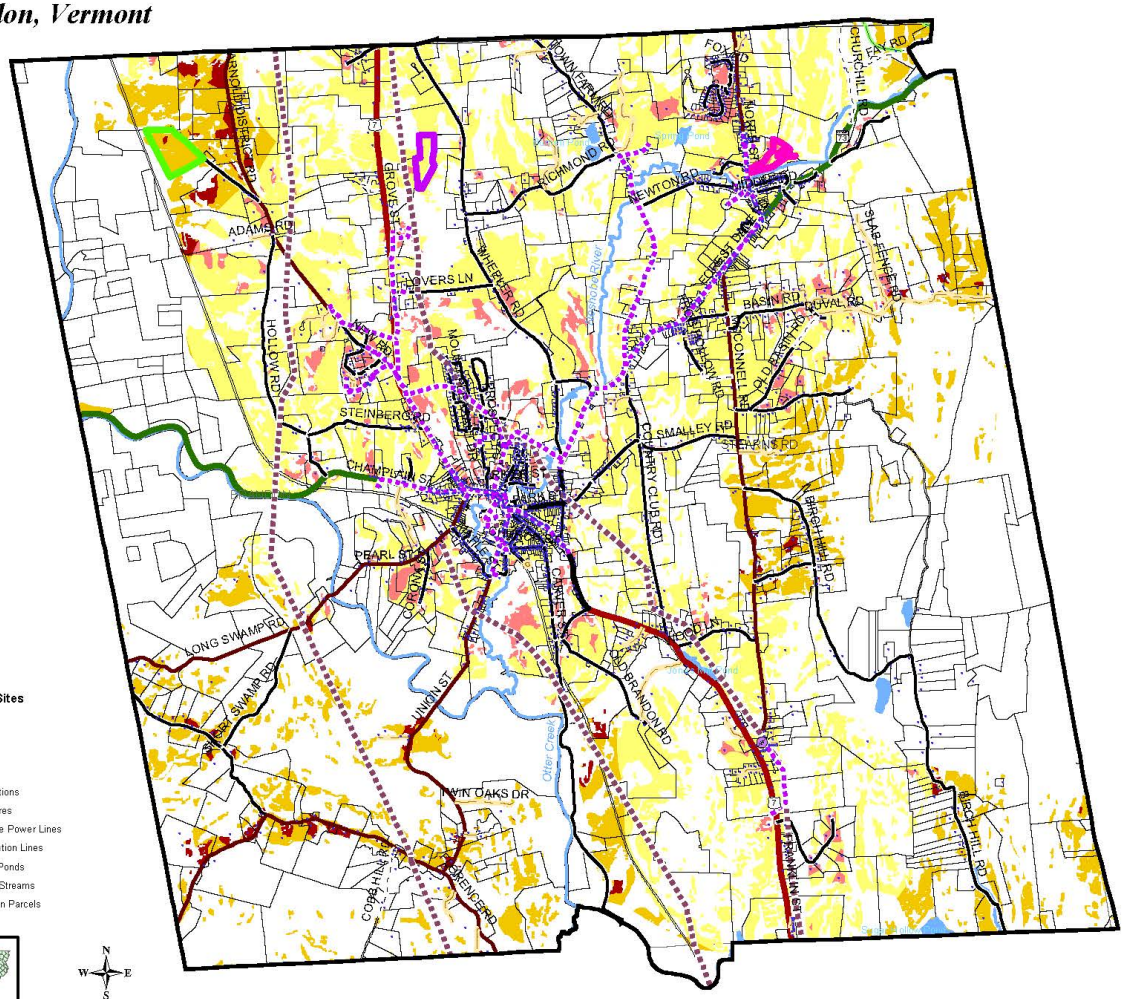
LOCALLY PREFERRED LOCATIONS

Based on Local Energy Committee

Brandon, Vermont



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Regionally or Locally Identified Critical Resources

Legend

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Prime Solar

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Secondary Solar, w/in 1 mile of 3 Phase power lines.

Secondary Solar

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Legend

Preferred Sites

Acres

- 12.28
- 21.52
- 42.82
- Substations
- Structures
- 3 Phase Power Lines
- Distribution Lines
- Lakes/Ponds
- Rivers/Streams
- Brandon Parcels

N W E S

May 6, 2019

Miles

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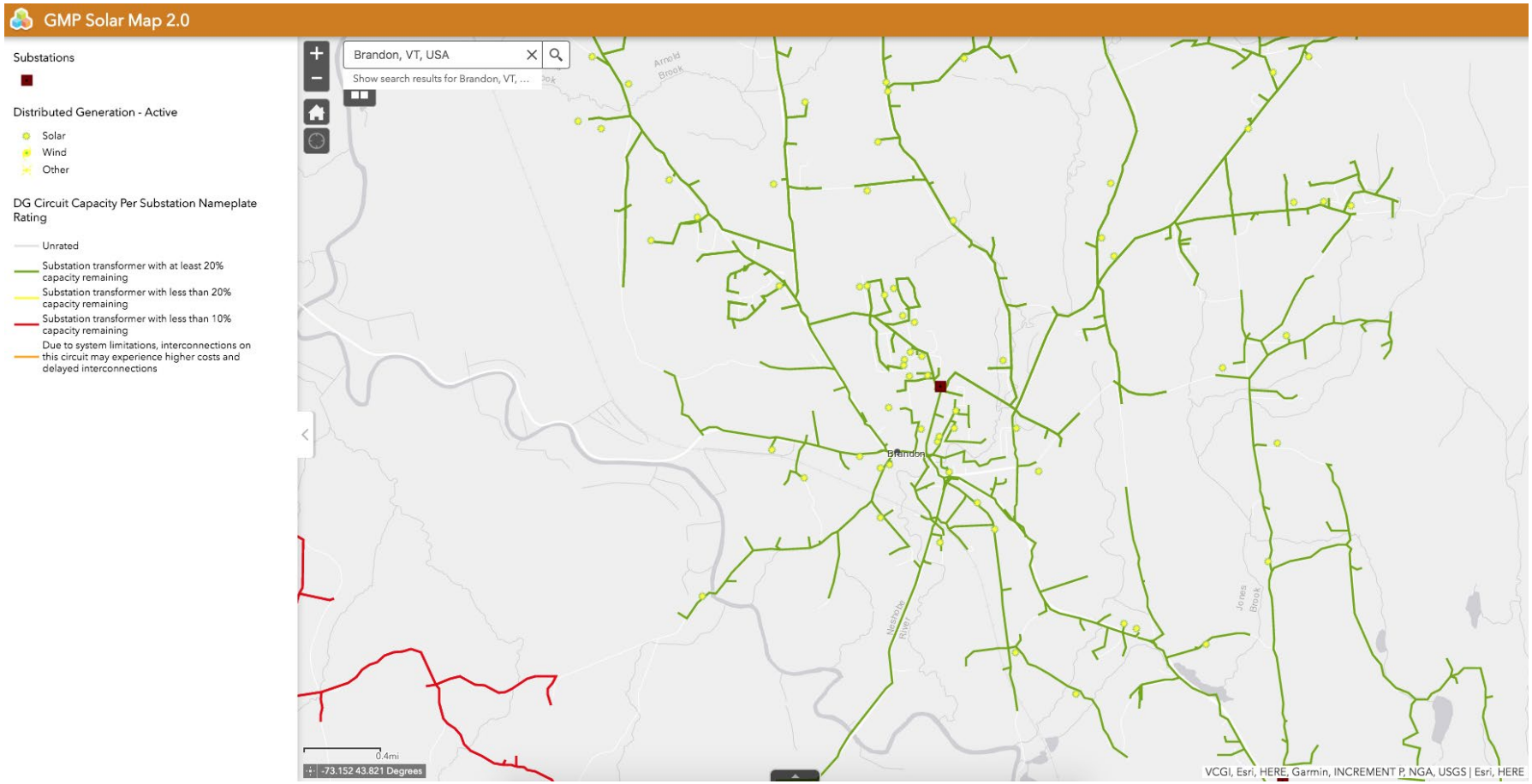
GMP Solar Map 2.0
Substations
Distributed Generation - Active
Solar
Wind
Other
DG Circuit Capacity Per Substation Nameplate Rating
Unrated
Substation transformer with at least 20% capacity remaining
Substation transformer with less than 20% capacity remaining
Substation transformer with less than 10% capacity remaining
Due to system limitations, interconnections on this circuit may experience higher costs and delayed interconnections
Brandon, VT, USA
Show search results for Brandon, VT, ...
Brandon
Arnold Brook
Jones Brook
0.4mi
-73.152 43.821 Degrees
VCGI, Esri, HERE, Garmin, INCREMENT P, NGA, USGS | Esri, HERE

Energy Strategies and Policies to Achieve Town Targets

The purpose of this section is to identify specific actions that have the greatest potential for Brandon to greatly reduce fossil fuel use in a sustainable manner. Specifically, the following are strategies and policies to advance conservation and efficiency in space and water heating (thermal), and transportation and related land use changes.

In 2018, an Energy Committee was named for the Town of Brandon. The committee and other town officials shall be responsible for the assigned tasks below:

Conservation and Efficient Use of Energy

To encourage energy conservation, efficient buildings and the efficient use of energy by individuals and the municipality, the Planning Commission with the assistance of the Energy Committee shall:

- Implement this plan and track progress on the policies and actions in this plan. This committee's task shall be to promote local residential and commercial efficiency and conservation improvements through coordination of information and technical assistance. This committee shall advocate for appropriate renewable energy generation throughout the town. This committee shall report regularly to the town Select Board. Committee tasks include:
- Co-sponsor and organize weatherization workshops for homes and businesses for new construction, retrofits, and existing structures.
- Work with local vendors, state and national programs to facilitate solar /renewable energy options for middle and lower income households.
- Coordinate with the following programs:
    - "Energy Star" building performance rating system.
    - Education programming and appliance upgrade rebates through Efficiency Vermont.
    - Weatherization assistance provided by BROC Community Action in Southwestern Vermont and NeighborWorks of Western Vermont.
    - Provide information/resources to promote strategic tree planting to maximize energy benefits.
    - Promote the use of landscaping for energy efficiency.
    - Promote the use of cold climate heat pumps with education/presentations in coordination with Efficiency Vermont and electric utilities.
    - Support the use of ground-source heat pump heating and cooling systems for new construction.
    - Promote municipal solar, school solar, and community solar or other renewable energy projects on town land and take steps to help viable projects move forward.

The Town of Brandon, including the Town Manager and Zoning Administrator, shall:

- Promote the use of the residential and commercial building energy standards by distributing code information.

- Encourage new municipal and existing town buildings to meet Leadership in Energy and Environmental Design (LEED) standards and encourage current structures to become more energy efficient.

To promote the decreased use of fossil fuels for heating, the Planning Commission with the assistance of the Energy Committee shall:

- Address fossil fuel reductions between 2015 and 2050 by incorporating solar production in order to reach its 2050 municipal target for renewable energy generation. All other alternative sources of energy would reduce fossil fuel consumption beyond the 90by50 target. Other renewable sources of energy may include small hydro projects, biomass and small wind.
- Support viable large-scale, regional, wood-fired heating districts and identify resource partners that make, sell and/or transport wood chips and/or wood pellets that could be used in a district heating system.
- Research the possible development of appropriately sited, cost-effective bio-methane facilities and related infrastructure.

To demonstrate the town's leadership by example with respect to the efficiency of municipal buildings, the Town Office shall:

- Distribute (in person and via the town's website) utility energy transformation (reduction) information to promote greater energy efficiency as well as information regarding residential and group/community solar generation.

Transportation

To promote reduced transportation energy demand and reduced single-occupancy vehicle use, increased use of renewable or lower-emission energy sources for transportation, and the increased use of public transit, Brandon shall:

- Promote the expansion of service of the Marble Valley Regional Transit District in the town.
- Continue close collaboration and promotion with the MVRTD to encourage greater ridership by town residents.
- Make public transportation information/resources available at town buildings and facilities.
- Promote the Go Vermont webpage, which provides rideshare, vanpool, public transit, and park-and-ride options.
- Encourage municipal employers to have the necessary equipment and training to facilitate conference calls, webinars, and other virtual meetings and information sharing.

To encourage a shift away from gas/diesel vehicles to electric or other non-fossil fuel transportation options, the Energy Committee shall:

- Promote the Drive Electric Vermont webpage which connects users to financial incentives, dealers, and recharging stations for EVs.
- Encourage major employers in the community that operate private fleets to switch some of their vehicles to alternative fuels, such as electric or biodiesel.

- Use town-wide events to promote different kinds of EVs and provide people interested in purchasing them an opportunity to talk with fellow community members who own them.
- Partner with Drive Electric Vermont, the Vermont Clean Cities Coalition, and other organizations to promote the expansion of workplace charging.
- Promote the installation of DC fast-charging infrastructure at strategic locations throughout town.
- Promote the installation of EV charging infrastructure as part of new development or redevelopment, especially for developments subject to Act 250.
- Encourage the installation of EV charging infrastructure that is accessible to school buses, municipal vehicles, snow plows, fire and other emergency vehicles, and farm vehicles.
- Encourage the development of additional refueling stations for alternative fuels, such as biodiesel and renewable natural gas (a form of biogas from methane), for both private and public transportation fleets by sharing station development costs between public and private interests.

To encourage the development of walking and biking infrastructure, the Select Board, the Planning Commission and the Town Manager shall:

- Encourage local planners, public works department, and others to implement complete streets concepts and provide sample language to include in municipal ordinances, regulations and bylaws to ensure that site plan reviews include pedestrian and bicycle access as well as safety and traffic-calming measures.
- Assess existing roads for their ability to accommodate safe and convenient walking and biking. Areas for improvement shall be prioritized and funding sought to align these areas with Complete Streets guidelines.
- Extend sidewalks and other types of bicycle and pedestrian facilities to high use areas and areas of new development.
- To better accommodate travel by bicycles, maintain a smooth roadway surfaces and sweep to remove sand, dirt, and trash as needed.
- Review state transportation projects in the town to ensure that Complete Streets are implemented.
- Use the Act 250 hearing process to ensure that local site plans include adequate bike and pedestrian infrastructure and safety measures.
- Close gaps in the transportation network by providing shared use corridors between important school and work destinations and nearby housing or between schools and downtowns or village centers and commercial districts.

To lead by example by making municipal transportation more efficient, the Select Board and the Town Manager shall:

- Purchase energy efficient municipal vehicles when practical.
- Encourage the installation of EV charging stations at the Town Office and other town buildings and facilities.

Land Use

Brandon is committed to land use policies that result in the conservation of energy, demonstrate a commitment to reducing sprawl/strip development, minimizing low-density development and making compact development more feasible. The Planning Commission, with the assistance of the Energy Committee, shall:

- Promote low-impact development and green infrastructure practices for new development.
- Provide water and sewer services to areas that would allow infill development in existing developed residential, commercial and industrial areas.
- Prepare a plan for improving pedestrian and bike connections and for the consideration of funding through a capital budget and program.
- Review and update the town Future Land Use Map to reflect the vision and goals of this municipal plan.
- Work with the Select Board to develop a long-term master plan to address the infrastructure necessary for compact development, e.g., sewer and water, pedestrian and biking facilities and parking.
- Work with regional planning groups such as REDC and RRPC to promote Brandon as a site for energy efficient business development and green transportation.
- Accommodate the safe and effective use of renewable energy systems (residential and commercial scale) and consider town policies that address design, height, safety, siting, sound and decommissioning.

Conclusion

The Town of Brandon's Energy Committee is hopeful that this document will provide energy benchmarking and a renewable roadmap for a more sustainable Brandon and, ultimately, a more sustainable Vermont. This Energy Plan is meant to be a living document that is updated with new data and, as technology advances, new roadmaps to reach Vermont's 90% renewable energy goal by 2050. In order to measure impact in the short, medium and long term, the Energy Committee commits to annually reviewing the aforementioned energy policies and strategies and their impact on the town and its residents.

Sources

Data Sources

Efficiency Vermont, 2016
LEAP (Long-range Energy Alternatives Planning), 2017
U.S. Census American Community Survey, 2011-2015
U.S. Energy Information Administration, 2017
Vermont Department of Labor, 2016
Vermont Department of Public Service, 2017
VTrans (Vermont Department of Transportation), 2016
Vermont Community Energy Dashboard, Energy Action Network, 2017

Appendix - <u>QUESTIONNAIRE</u>

<u>1. Owner Information</u>

A. Owner intends to construct a __ kW (sites >15kW need to fill out the form below; the form is not necessary for sites <15kW) at the following address or legal description (system site):

B. This site is on (circle one):

- Public Land
- Private land

C. Is this a residential or commercial installation?

D. This site does or does not require local permits or improvements in public roads/infrastructure improvements to access/operate the installation? If yes, please describe.

E. Has owner secured rights to use the above-mentioned site?

F. Please describe what benefits this project would bring to the Brandon community.

G. This installation will be (circle one):

- net metered
- grid tied

H. If net metered who will be receiving the generation credits?

I. If this is a secure or restricted access site, how will security be handled? Will emergency personnel be able to access this site?

J. Who owns the RECs (Renewable Energy Credits)? Will the RECs be sold?

<u>2. Known and Possible Constraints</u>

A. There are state and regional constraints on locating renewable energy installations. Please indicate if this site does or does not conflict with these known or possible constraints.

1. *Known Constraints: vernal pools; DEC river Corridors; FEMA floodways; State-significant Natural Communities and Rare, Threatened and Endangered species areas; National Wilderness Areas; Class 1 and Class 2 wetlands.*
2. *Possible Constraints: Agricultural soils; FEMA Special Flood Hazard Areas; Protected lands (state fee lands and private conservation lands); Act 250 Agricultural Soil Mitigation Areas; Deer wintering areas; ANR's Vermont Conservation Design Highest Priority Forest Blocks; Hydric soils.*

B. The Town of Brandon has preferences based on the above-mentioned list. **Please include a site plan that shows location of renewable energy project in relation to the parcel boundaries, the converters and necessary power infrastructure to access the grid from this location. Indicate here what utilities or services would be required by the City:**

Brandon infrastructure and population density plans strive to concentrate residential growth to limit the impact of service infrastructure required. Any commercial proposals within these targeted population centers would need to be weighed against the future use of these spaces for population and municipal needs. Project will need to follow existing zoning procedures and practices.

3. Project Details

A. Type of generation:

B. Expected kW/kWh annual generation:

C. Is this a project that might be done in phases?

D. Are there any other phases planned for this site in the future?

E. Zoning variance required?

F. If located on public land, are public approvals required?

G. Expected construction start date:

H. Expected completion date:

I. Expected site maintenance plan:

J. Town of Brandon project timeline:

- Completed review by developer and town manager and planning commission
- Pre-construction site visit
- Final visit after PUC certificate of good issued and review of scope of project changes
- Midpoint construction visit
- Final preoperational visit
- Annual operational visits (to ensure best possible service to investors, the Town of Brandon will request economic and energy updates from the company on an annual basis)

4. References and Tools

- The Vermont Community Energy Dashboard: https://www.vtenergydashboard.org/
- VT Energy Dashboard (Brandon's baseline): https://www.vtenergydashboard.org/my-community/brandon/progress
- The Renewable Energy Atlas: https://www.vtenergydashboard.org/energy-atlas. This is a helpful tool for communities and people interested in exploring and identifying energy projects, known or possible constraints, and sites best suited for renewable energy deployment. Search for Brandon and find the energy resources deployed and select Layers on the right-hand side of the Atlas to see the Act 174 constraints.
- Vermont energy committees network: https://vecan.net/

HOUSING

24 V.S.A. § 4382 (10) A housing element that shall include a recommended program for addressing low and moderate income persons' housing needs as identified by the regional planning commission pursuant to subdivision 4348a(a)(9) of this title. The program should account for permitted accessory dwelling units, as defined in subdivision 4412(1)(E) of this title, which provide affordable housing.

Introduction

Along with its unique downtown streetscape, Brandon has an large number of architecturally significant single family homes, several planned development areas with more modern style cape and ranch homes, and throughout town a variety of home styles ranging from late 18th century to modern. Of note are the 242 Structures located in the Brandon Village Historic District, as listed in the National Historic Register, many of which are single family homes.

Goals

Maintain, preserve, and when appropriate revitalize the unique architectural assets of the town, many of which are residential. Provide a wide selection of housing types and styles to encourage a diverse population.

Policies

- Encourage the preservation and renovation of existing homes, especially unique and historic properties.
- Encouraging infill development where applicable.
- Encourage private homeownership and support property owners in the maintenance and improvement of residential neighborhoods.
- Encourage a housing balance with an appropriate mix to meet all market needs.
- Continue to support efforts to provide safe and affordable housing.
- Promote cluster development that minimizes consumption of land and allows for conservation of farmlands, forests and open space.
- Encourage energy efficiency upgrades to account for more modern construction practices.

Background

Existing Conditions

Brandon has an existing settlement pattern typical of New England towns. Most of the commercial activity and higher density residential development is in and near the historic core of the community. The density of residential development decreases radiating out from the

center of town and transitions to a mix of industrial, commercial, agricultural and recreational uses. Development is also concentrated along the main arteries radiating from this center. New development typically occurs toward the perimeter of the village area, although the potential for infill development exists. The two largest residential concentrations are in the Brandon Village area and Forest Dale community, but there are a large number of homes spread throughout the more rural parts of town as well.

While the majority of Brandon residents live in single-family homes, there is a wide variety of housing options in town, including multiple-dwelling structures of up to six units, senior housing, and condominiums. Brandon has a wider variety of housing options than its neighboring communities. In 2010, 64 percent of occupied housing was single-family detached units, 14 percent mobile homes, and 22 percent were structures containing two or more units.

In 2010, 79 percent of housing units were owner-occupied and 21 percent were renter occupied. Brandon's home ownership ratio is slightly below that of other more rural towns in the region, as would be expected for a larger, more diverse community. According to the 2005 Rutland County Housing Needs Assessment, Brandon has a significantly higher rental housing supply than towns of comparable size in the region.

Seasonal or vacation housing units, common in other Rutland County communities, are less than 3.9 percent of the housing in Brandon according to the 2010 Census. The absence of a significant summer or winter recreation area, such as a ski area or lake, has lessened this type of development in town. There are a number of Brandon residents who spend a portion of the winter away from Vermont.

Brandon's population is composed predominately of family households. According to the 2010 Census, there were 1,854 households in Brandon and a total population of 3,966 persons. Families made up 64 percent of the households in 2010, and the average household had three members. Of the families with children under the age of 18, a large portion, seventy-seven percent are two-parent households. The "over 65" age group accounted for 16.5 percent of Brandon's householders.

Brandon has a significant proportion of senior and affordable rental housing units in multi-family buildings. Most of them were developed by renovating existing institutional buildings (Brandon Training Center) or commercial buildings (several downtown locations). Due to Vermont Statutes, they are granted special tax considerations, which affects municipal revenues.

Since 2000 land values have appreciated significantly in Brandon. That fact, combined with the cost of permitting and improving building lots (water, electrical power, wastewater, vehicle access, etc.) has led builders and developers to target households with higher incomes for new construction. Along with being something of a bedroom community for Rutland and Middlebury, Brandon has always been attractive to people purchasing second or retirement homes.

Housing Market

The Brandon market has mirrored the national trends over the past 10 years, with a steep increase in housing sales and price appreciation, followed by a decline as the housing market crashed and the recession occurred. An increase in foreclosed properties also has had a great impact on housing prices and sales. Nevertheless, Brandon, similarly to the rest of Vermont, has not seen the same duration or scale of volatility as markets elsewhere.

Brandon has a moderately priced housing market. In 2005 the average selling price of homes sold was $175,617. In 2006 there were a total of 19 homes sold with an average selling price of $214,508. In 2014 there were 33 non-private home sales at an average selling price of $148,529. This mirrors the overall state and national trends following the boom and bust – and now slow recovery – from the housing bubble.

Affordable Housing

Homeownership in Vermont is difficult for many households due to the high upfront costs of purchasing a home, the increase in sales prices in recent years, and the tightening of credit requirements following the housing bubble collapse. Brandon has a considerable number of rental housing units dedicated to low income residents and seniors that have been developed in recent years by non-profit organizations such as the Rutland County Community and Trust and NeighborWorks of Western Vermont.

Aside from housing specifically set aside for lower income residents, the Town can encourage additional units to be created at affordable prices by allowing a wide range of housing types. For example, accessory dwelling units, as defined in State Statute and the Brandon zoning ordinance, are a permitted use and represent a simple way of encouraging new rental units while maintaining the general character of existing single-family neighborhoods. Other options such as allowing duplexes or multi-family houses in areas where growth is desirable, will generate more rental housing while allowing smaller lot sizes will generally translate into more affordable prices for people seeking to own.

Although there are a number of affordable housing options in Brandon, the total need is not met. There is a widening gap between wages and housing costs within Vermont as a whole, and Brandon is not an exception.

Housing affordability can be tied directly to a number of other factors such as heating efficiency, whether or not automobiles are necessary based on location, and maintenance costs for the building and the land. Therefore, encouraging a diverse housing stock is one way of helping to meet the overall need.

Rental Housing

A large portion of affordable housing is usually in the form of rental units. The Town of Brandon adopted a Rental Housing Code in 1983 and updated it in 1999. Since all "non-owner occupied housing facilities" and "owner occupied housing facilities wherein two or more rooms are rented" are required to be inspected prior to occupancy, an accurate inventory of rental units is readily available. The Rental Code, in addition to enforcing a higher standard of rental housing, gives the town a fairly accurate picture of available rental units. A Certificate of Occupancy must be issued prior to occupancy by a new tenant and indicates the number of rental units that come onto the market in a year.

Action Steps

- Encourage the preservation and renovation of existing housing.
- Educate property owners as to available tax credits and other incentives for the rehabilitation of old or substandard housing.
- Revise local zoning to encourage new growth in existing residential areas, and to encourage residential mixed-use in the downtown area.
- Require pedestrian friendly development (sidewalks and bike paths) with any new significant subdivision or development.
- Allow for a wide-range of housing units and smaller lot sizes to encourage private sector creation of housing that is more affordable to average Vermonters.
- Include provisions in the local zoning which allows for review of site conditions (stormwater runoff, erosion, floodplain and wetland impacts, etc), settlement patterns, natural features, the placement of driveways, the location of building sites including setbacks, and other aspects of development to reduce impact to sensitive natural areas, prime agricultural land, water quality, open spaces, the working landscape and important views and vistas.

CHILDCARE

24 V.S.A. § 4302 (13) To ensure the availability of safe and affordable child care and to integrate child care issues into the planning process, including child care financing, infrastructure, business assistance for child care providers, and child care work force development.

Introduction

As more households have more than one income per family, parents of young children need safe, convenient, and affordable childcare options. There currently are at least seventeen facilities in Brandon, seven of which are licensed centers. The remaining ten childcare facilities are registered residential operations. Information about existing providers is available on-line from the Vermont Department of Children and Families.

In addition to its important to working parents, childcare is a big part of Vermont's economy. Current supply in Brandon does not meet the demand for childcare, especially after-school care. While the SOAR program, the Boys and Girls Club, and the Recreation Department are able to fill some of these gaps, these programs do not at present meet the needs of many working parents. Thus, Brandon offers a prime opportunity for motivated, enthusiastic, and entrepreneurial childcare providers to open up shop and contribute both to Brandon's bottom line and to its livability.

Goal

Expand the number and variety of childcare providers, with an emphasis on meeting gaps in current availability.

Policies

Encourage flexibility regarding location and facility type.

Background / Analysis

Children under 15 years of age in Brandon comprised about 17.2 percent of the population according to the 2010 Census figures, slightly down from about 20 percent in 2000. Of those children, 229 were under the age of five, and 238 were five to nine years old. Families with children under the age of 18 formed 25.5 percent of Brandon households (a decline from 32 percent in 2000). While 8.8 percent of Brandon's families were listed with poverty status, over half of those families have children under the age of 18 (57 of 100 families in poverty), which represents a marked decline from the 2010 Census (74 of 80 families in poverty). Furthermore, female-headed families living in poverty number 33, all with children under the age of 18, a decrease from 55 in 2000. On the other hand, given increasing mobility among lower-income persons, as well as the small sample size, the precise numbers may vary widely from year to year or even season to season, making reliance upon such figures untenable.

While the benefit of affordable child care is widely acknowledged as a boost for the economy and workforce, it is especially important to the survival of families working to make ends meet. It is difficult to assess the need for child care facilities in Brandon because of the high proportion of adults who commute to other communities to work. It is expected that many parents choose to have their children near to their places of work, thus potentially reducing the need for facilities in Brandon. Even so, it is reasonable to assume that child care is potentially an important issue to Brandon residents, given the high percentage of families living in Brandon who have young children. In addition, attention to the issue of affordable child care may also help promote Brandon as a favorable location for young families.

Action steps

- Continue to permit the use of single-family homes in Brandon for small-scale family child care facilities as home occupations.
- Review regulations and assess potential barriers to entry.
- Support the Boys and Girls Club in Brandon.
- Support efforts by the Neshobe School to provide high-quality preschool services.

RECREATION

Introduction

Recreation is an important aspect of Brandon's community and family life. Brandon's proximity to a variety of outdoor activities provides a wealth of individual opportunities for recreation, while group activities are coordinated by several different organizations.

Brandon's recreational infrastructure serves as an attraction to residents and friends in near-by towns. Many activities for people of all ages are organized by Brandon's Recreation Department. The Brandon Senior Citizen Center coordinates activities for area residents in the upper age brackets. Devoting resources to recreation will contribute to a healthy living environment for the current and future community of Brandon residents.

Goal

Create a physical and social environment in which recreation is a key aspect of healthy community life and daily activity for all Brandon's residents.

Policies

- Provide a range of year-round recreational activities and opportunities for people of all ages.
- Continue to maintain and expand recreational facilities and theTown's Recreation Department programs.

Background

There are numerous opportunities for recreation provided by a mix of public and private organizations. The Police Department, Brandon Fire Department, and the Brandon Area Rescue Squad (BARS) organize the annual Safety Day, which includes information on bike safety. Free bike helmets for children are available through the Police Department and BARS. The Town maintains several outdoor parks and facilities. Active recreational facilities include Estabrook Park, just north of the Village, and the Seminary Hill playground, located in the Village. These facilities combined have tennis and basketball courts, a ball field, playground equipment, and an ice skating rink in winter. Passive recreational spaces include Central Park, Kennedy Park, Green Park, and Crescent Park. In addition, the recreational facilities and fields at the Neshobe Elementary and Otter Valley Union High Schools are available for limited use and activities. The Brandon Town Forest offers great back country hiking and snowshoeing opportunities along the eastern boundary of the town line.

Brandon's Recreation Program

Brandon supports a Recreation Department that provides a full array of recreational opportunities for town residents. The Recreation Department has been directed to provide a variety of year-round programs, which are publicized in a seasonal brochure. The Recreation Department sponsors programs for people of all ages from Brandon and surrounding

communities and include a variety of sports activities as well as community gatherings and field trips. Many local groups and citizens contribute to the efforts of the Recreation Department and events are often a collaborative effort of many organizations. A mix of town funds, fees, grants, and individual and business contributions support the Recreation Department. It is the goal that programs, activities, and events be self-sustaining.

Recreation Infrastructure

There are also many informal recreation opportunities in and around the Town of Brandon. Popular outdoor recreational activities include hiking, skiing, snowshoeing, fishing, birding, and hunting. The Vermont Association of Snowmobile Travelers (VAST) maintains a trail system for snowmobiling in Brandon and Forest Dale, much of which is on private land with owner permission.

A portion of the Green Mountain National Forest is located in Brandon and offers access to an extensive trail system. Brandon serves as a gateway community to the Moosalamoo National Recreation Area located within the National Forest boundaries. The Moosalamoo Association works to conserve the physical landscape in a way which preserves the spiritual and recreational experiences that draw visitors and residents to the area.

The Neshobe River and Otter Creek are excellent waterways for recreational activities, although the absence of public access points inhibits their use. In order to assure their recreational value, maintenance of their water quality should be a consideration when making decisions about adjacent and upstream land uses and activities.

While they are not within Brandon's boundaries, Lake Dunmore, Fern Lake, and Silver Lake offer exceptional recreational opportunities. Branbury State Park at Lake Dunmore has camping, picnicking, boating, and swimming facilities. Lake Champlain is within 20 miles of Brandon and provides, according to the pros, some of the best bass fishing in the world. These lakes have a positive impact on Brandon and its businesses. Many visitors to Brandon stay in our inns and bed and breakfasts because of their close proximity to our lakes, ponds, and rivers. The local stores and eateries benefit as part of the "trickle down" effect.

Privately-owned facilities for camping, golfing and fitness round-out the recreational options in Brandon. The 18-hole Neshobe Golf Club is one popular, privately-owned recreation center. For more information regarding privately owned recreation facilities, please contact the Brandon Area Chamber of Commerce.

Action steps

- The Recreation Director, with assistance as needed or desired from town staff, commissions, and residents, will complete the *Recreation Master Plan* for the Townof Brandon.

- Develop a capital budget for the Recreation Department that will continue to seek grant funding for programs and facilities improvements.
- Investigate the acquisition or construction of an indoor recreational facility that could potentially include a gymnasium.
- Provide appropriate staffing to support recreational programs and opportunities for residents of all ages.
- Support the revitalization of the Brandon Town Hall as a community center.
- Work to secure and maintain public access to the Otter Creek and Neshobe River for recreational uses such as canoeing, kayaking, and fishing.
- Promote the clean up of lower Carver Street and the Syndicate Road to provide for more attractive recreational opportunities.
- Develop town-owned riverfront properties for public use.
- Pursue opportunities to construct paths and trails for biking, walking, hiking, , and skiing. Develop maps that promote these areas and opportunities.
- Encourage links between existing and future recreational facilities and resources to further extend and integrate the system (for example between the village and Estabrook Park).
- Require sidewalks and other pedestrian and bicycle friendly improvements as a condition of future planned residential and other major development.

HISTORIC AND CULTURAL RESOURCES

24 V.S.A. § 4382 (5) A statement of policies on the preservation of rare and irreplaceable . . . scenic and historic features and resources.

Introduction

Brandon and Forest Dale possess "an architectural legacy, a cultural history, and a unique visual identity" that contribute to the creation of community, historic pride, and economic advantage. These assets must be carefully managed.[16]

Goals

1. Protect the town's historic settlement pattern and architectural assets as a significant, non-renewable resource that creates a sense of place and community well being.
2. Promote cultural advancement and civic engagement.

Policies

- Ensure the preservation, restoration, and adaptive re-use of historic public buildings and privately owned structures.
- Encourage the compatibility of new commercial construction within the Town with the historic character of the community.
- Support the protection and preservation, where appropriate, of significant historic structures, sites and districts, the townscape and landscape, as well as prehistoric and significant archaeological sites in the Town of Brandon.
- Encourage Heritage Tourism.
- Encourage community art projects, cultural events, festivals and cultural tourism.
- Encourage cultural resource groups to collaborate and coordinate with the Town and other interested parties.
- Encourage partnerships with local community organizations for various projects (such as park improvements, downtown redevelopment, and events).
- Utilize public facilities and space as venues for artists, historical exhibitions, and cultural events.
- Support the Brandon Public Library, Brandon Senior Citizen's Center and other quasi-public organizations in Brandon.
- Support the Town Hall improvement efforts for more comfortable use for public events and meetings.
- Support the growth of arts, cultural, and civic organizations in Brandon.

[16] Much of the information and language of this section has its roots in the Brandon Workbook (updated by Brandon historic Preservation Commission, 2002).

Background

Brandon has a rich prehistoric and historic legacy as is evident in the settlement and land use patterns, residential structures, remains of old commercial and industrial businesses, cemeteries, archaeological sites, and community gathering places throughout the town. Brandon is rich in the historic artifacts of the 19th century, particularly in buildings and structures. The legacy of the anti-slavery movement and the Civil War are particularly strong here and constitute an opportunity for heritage tourism. Early 19th century industrialization is also very evident in Brandon. Many aspects of modern life in Brandon are touched by the past. Our magnificent Greek Revival town hall is the most prominent public example of this legacy.

Several organizations in Brandon are dedicated to the preservation of the town's historic resources as well as public education. They include the Friends of the Brandon Town Hall, the Stephen A Douglas Birthplace Community Center, Inc., which includes the Brandon Museum, the Lake Dunmore Chapter Daughters of American Revolution, and the Brandon Historic Preservation Commission. These groups are mainly supported through grants and private resources along with some public funding.

Brandon Village, which encompasses the majority of downtown, is listed on the National Register of Historic Places (see Figure 1). Other sites on the Register include the Green Mountain Iron Furnace in Forest Dale and the Sanderson Covered Bridge on Pearl Street.

The State of Vermont also has a Register of Historic Places and lists three historic districts: Brandon Village, Rossiter Street and Church Street.[17]

In the late 1980s, the State Division of Historic Preservation published an inventory of the historic structures in Rutland County entitled, The Historic Architecture of Rutland County. The publication details the historic districts and buildings in Brandon and is an excellent source of information. The Brandon Workbook was developed in the late 1980s and updated in 2002 by the Brandon Historic Preservation Commission. It has guidelines for historic preservation and design improvements within the downtown area and is also a reference for architectural, historic and townscape information.

There are many prehistoric archaeological sites within the Town of Brandon, some documented and others yet-to-be examined.

[17] The three districts are Brandon Village, which is the vast majority of the village, as well as the Rossiter Street and Church Street historic districts.

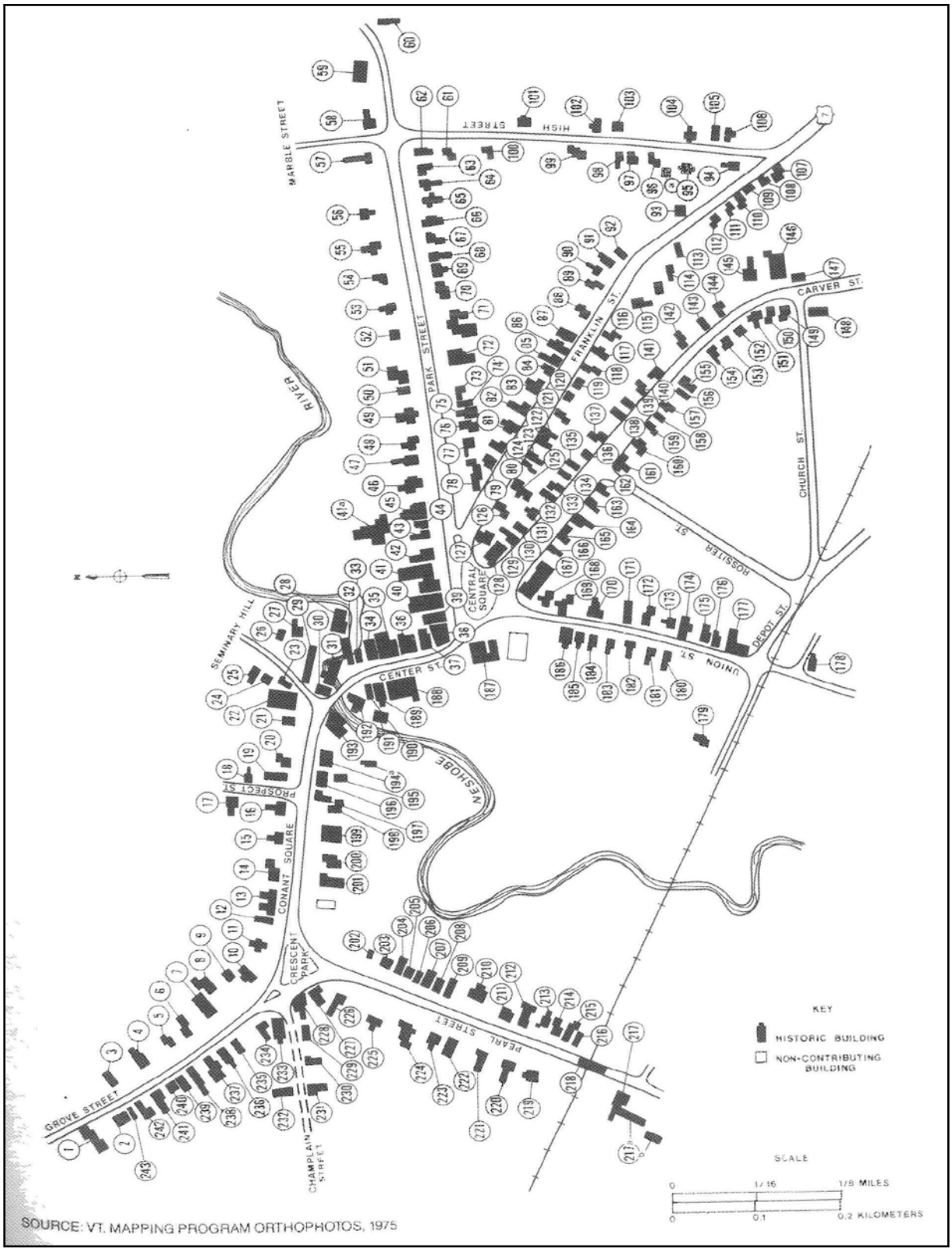

Figure 6 Brandon Village Historic District map (source: Vermont office of Historic Preservation)

Brandon also benefits from a strong set of cultural resources. In addition to the recreational opportunities and historic charm, Brandon has a thriving arts community. Brandon residents lend energy and enthusiasm to cultural organizations, religious groups, and social service initiatives. Brandon has many active organizations working to enhance the community with cultural events. These organizations promote fundraising, ancestral heritage, economic development, youth, social service and education. The churches contribute many social and community services as well as serve as historic resources. The Brandon Artists Guild provides space for member artists to display and sell their art. In addition, the "artists' space" at the Granary on Union St. provides affordable rental studio space for local artists. Brandon Town Players is a community theater organization which stages shows, revues and dinner theater. This Plan supports the growth of arts and cultural organizations in Brandon.

Finally, it should be mentioned that such civic organizations as the Lions Club, Masons St. Paul's #25 Lodge, and Chamber of Commerce, among others, make valuable and regular contributions to the civic and cultural life of our Town.

Action steps

- Leverage Brandon's Certified Local Government (CLG) and Downtown Designation status by participating in programs for downtown improvements and pursuing grant opportunities, in collaboration with community organizations, to continue to protect and preserve Brandon's historic resources.
- Obtain a state Village Center designation for Forest Dale to access state grant programs, tax incentives, and other resources.
- Use federal guidelines to document historic structures, and favor preservation over demolition in the zoning ordinance.
- The Historic Preservation Commission shall train the Select Board, Development Review Board, Planning Commission, and Zoning Administrator in the management of historic information and documentation and preservation of historic resources.
- The Historic Preservation Commission shall develop and maintain a complete inventory of historic structures, sites, and settlement patterns in support of Brandon's planning and zoning.
- Encourage a rewrite and update of the History of Brandon, a book written and published by the Town of Brandon in 1961.
- Support public and private efforts to preserve and restore historic resources with the help of organizations such as the Brandon Historical Society and the Brandon Historic Preservation Commission.
- Support municipal and private efforts to preserve the Brandon Town Hall and the Stephen A. Douglas Birthplace as important historic and current cultural resources.
- Pursue a heritage byway designation from the Green Mountains to Lake Champlain.
- Encourage partnerships with local community organizations for various projects (such as park improvements, downtown redevelopment, and events).

- Utilize public facilities and space as venues for artists, historical exhibitions, and cultural events.
- Support the Brandon Public Library, Brandon Senior Citizen's Center and other quasi-public organizations in Brandon.
- Support the Town Hall improvement efforts for more comfortable use for public events and meetings.
- Support the growth of arts and cultural organizations in Brandon.
- Protect Brandon's village character and historic architecture as key economic assets through making the impact on historic character a mandatory consideration in the planning of public projects.
- Encourage heritage tourism.
- Support the Historic Preservation Commission in an effort to train in the management of historic information and documentation of historic resources.
- Encourage the use of the Brandon Workbook as a style guideline when developers are renovating historic structures and adopt these guidelines for historic preservation
- Pursue grant opportunities, in collaboration with community organizations, to continue to protect and preserve Brandon's historic resources.

ECONOMIC DEVELOPMENT

24 V.S.A. §4382 (11): An economic development element that describes present economic conditions and the location, type, and scale of desired economic development, and identifies policies, projects, and programs necessary to foster economic growth;

Introduction

Planning for economic development presents challenges in a small community but is an important part of a town's planning goals. Economic development, once the sole province of the private sector, is the process by which the community sets out to improve the climate for retaining established and attracting new businesses that support jobs and sustain tax revenues. Brandon derives most of its revenue from the taxation of local property to support municipal services. Brandon needs to be active in managing economic growth to ensure the future of its tax base and quality of life.

Brandon has many valuable assets including water and sewer capacity, available commercial buildings and land, a pre-permitted industrial park, an excellent school system, a vibrant historic downtown, a well-educated workforce, proximity to fiber optic, and a range of social and community services, which make it an attractive location for businesses as well as a desirable place to live and work.

Brandon also has significant recreational, historical, cultural, and natural resources, as discussed elsewhere in this Plan. These add substantially to the quality of life and can influence businesses and individuals considering locating or investing in Brandon. These resources are necessarily part of a fully integrated strategy for economic and community development.

Goal

Create an economic climate that retains and attracts businesses which contribute to our quality of life.

Policies

- Maintain and enhance a diversified local economy.
- Encourage improvements to the visual appearance, accessibility and character of downtown which accommodate both the historical integrity and modern needs of the village area.
- Encourage targeted economic growth in designated development areas, specifically at Park Village and in downtown Brandon.
- Maintain infrastructure to support existing development and economic growth.
- Include Brandon's Recreational, Historical and Cultural assets as a strong element when planning for development

Background

Economic Characteristics

Brandon has been identified as a "Sub-Regional Center" located between Rutland, one of Vermont's largest cities, and Middlebury, an educational and cultural focal point. A Sub-Regional Center is a place that exerts a market pull over a multi-town area, but does not have a sufficient business concentration to be truly regional in scope.[18] Brandon has several large businesses as well as numerous smaller establishments, many working in niche markets. Brandon has a diverse economic base, a thriving, attractive and pedestrian-friendly central business district and a skilled labor pool. It is a relatively inexpensive town in which to rent or buy commercial or residential real estate. Recent decades have been characterized by steady growth in all aspects, from tourism and service businesses to industries selling products both nationally and internationally.

Businesses

The key to Brandon's economic stability and growth lies in the diversity of its economy. As a business center for surrounding communities, Brandon enjoys a greater number and variety of commercial and professional services than its local population demands. Brandon is home to several of the larger employers in Rutland County. Important employers in Brandon include manufacturers, banks, builders, the public school system and medical facilities.

Other major contributors to Brandon's economy are the numerous smaller businesses operating in Brandon. These employers are in a variety of sectors and provide steady employment opportunities. According to the Small Business Administration, small firms represent 99.7 percent of all employer firms nationwide, and employ about half of all private sector employees. In Vermont, small firms employed 63.6 percent of the state's non-farm private labor force in 2004. Brandon's businesses confront the same challenges which businesses everywhere face in a global economy.

Workforce

In 2000, Brandon, with 3,917 residents, was the fourth largest town in Rutland County and has 6.2 percent of the county's population. In 2010, with 3,966 residents, Brandon remained the fourth-largest town in Rutland County, but it held a greater percentage of the population, at 11.8 percent. In other words, Brandon has remained an attractive place to live for Rutland County's workforce.

The annual average unemployment rate was 4.1 percent of the population in 2010, a marked decline from 12.4 percent of the population in 2000. According to the 2010 Census, a majority

[18] 1997 Vermont Downtown Economic Impact Study, Douglas Kennedy and Associates. See Figure 20 in the Technical Appendix.

of the employed residents of Brandon work in educational services (18%), administrative, support, waste-management services (18%), and wholesale trade (13%). Manufacturing, construction, retail trade, and professional, scientific, and technical services accounted for most of the other employment sectors where Brandon residents were employed

The decline in unemployment has come with a fundamental shift from manufacturing (40% in 2000) as a main source of employment for Brandon residents. This shift, as well as the shift away from government (23% in 2000) has kept Brandon middle-class wages stagnant, even as the median income in Vermont rose overall. Significantly affecting many areas of planning, it has been estimated that about two-thirds of the Brandon workforce commutes out of town to work.

Economic Development Activities

The Brandon Area Chamber of Commerce, one of four chambers in Rutland County, works to support local businesses as well as coordinate and promote tourism marketing in the region. The Brandon Chamber has over 200 members and is active in community-wide initiatives. Both the Chamber and the Town of Brandon have developed web sites which serve to promote the town and provide information to both residents and visitors.

Park Village has been developed commercially, industrially, and residentially. Some of the growth at Park Village has been caused by the relocation of businesses formerly located in downtown Brandon, creating more available commercial space in the village. Filling the vacant retail and office space in downtown Brandon with compatible businesses is a high priority for the Town and Chamber of Commerce. The Brandon Industrial Park, located off Arnold District Road near the Park Village complex, is pre-permitted for industrial use, and offers lots suitable for a variety of uses.

Brandon's central business district and surrounding core is a Vermont Designated Downtown. This designation makes available a number of tax credits and other incentives designed to strengthen the downtown area. MainStreet Brandon (formerly, the Brandon Downtown Development Corporation) helps to oversee this program and promote Brandon's downtown.

The Town of Brandon funds an Economic Development Officer position. This position is charged with retaining and recruiting new businesses and organizing municipal projects aimed at improving facilities and infrastructure that are vital to new economic development initiatives.

Action steps

- Maintain an active Downtown Development Corporation as required by VSA Chapter 24, Title 76A for Downtown Designation status.
- Reapply for Downtown Designation status in calendar year 2017 and continue to actively use this designation in seeking grants and other economic development activities.

- Write a capital improvement plan for the downtown development district as required by VSA Chapter 24,Title 76A for Downtown Designation status.
- Retain the role of Economic Development Officer
- Actively market the Brandon Industrial Park and other appropriate locations to financially stable, future-focused manufacturers in growth industries.
- Actively market Brandon to telecommuters, creative freelancers and Internet-based businesses.
- Create a standard set of tax incentives for businesses operating in or moving to Brandon.
- Plan and pursue state recognition of designated growth centers adjacent to and including the Designated Downtown district.
- Encourage commercial growth within the area easily accessible to pedestrians from the central business district and served by current municipal infrastructure, including water, sewer and sidewalks.
- Support appropriate growth in all the neighborhoods of Brandon including downtown Brandon, Park Village, Forest Dale, and the Brandon Industrial Park.
- Support businesses which maintain the working landscape, such as agriculture and forestry.
- Build upon Brandon's existing assets and business strengths, and encourage growth of existing local businesses.
- Encourage and support efforts to promote Brandon as a tourist destination.
- Encourage businesses to utilize vacant space in downtown Brandon and consider joint public and private investments to upgrade existing buildings.
- Target employers who pay a livable wage and sustain or enhance the quality of life in Brandon.
- Support the active involvement and efforts of residents in obtaining Designated Village Center status for Forest Dale.

NATURAL RESOURCES

Introduction

24 V.S.A. § 4382 (5) A statement of policies on the preservation of rare and irreplaceable natural areas, scenic . . . features and resources.

The Town of Brandon has an abundance and variety of valuable natural resources. The environment has played an important role in shaping Brandon's image and provides a continuing public and economic benefit to the community. Economic activities dependant on natural resources, including agriculture and forestry, are described below with policies related to their use and conservation.

Goal

Provide for the long-term protection of natural areas and promote conservation of our natural resources.

Policies

- Identify, protect, and preserve Brandon's natural resources.
- Protect and retain surface waters, wetlands, floodplains, fluvial erosion hazard areas and groundwater resources identified on the Natural Resources and Fluvial Erosion Hazard Area maps.
- Preserve significant woodland, agricultural, and other large blocks of undeveloped or open land, and maintain connected wildlife corridors.
- Ensure that new development, construction and rehabilitation activities are compatible with Brandon's infrastructure and streetscapes.

Background

Physiography

Topography

Brandon is composed of four major physiographic regions each influencing the town's geologic, climatic and vegetative characteristics. The south-central and western portions of the town are within the Champlain Lowland and are dominated by the Otter Creek Valley. The southwest corner of Brandon is the extreme northern reach of the Taconic Mountains. From the summit of Stiles Hill (1,301 feet), the land descends abruptly to 400 feet in one mile, demarcating the perimeter of the lacustrine plain. The lowest elevation in the town is 357 feet at the downstream extent of Otter Creek in the northwest part of town.

The most dominant physical feature is the ridgeline of the Green Mountains that forms Brandon's eastern boundary. The Birch Hill promontory and several marshy depressions in the immediate area characterize the lower slopes. Slightly eastward is Sugar Hollow, which parallels the ridgeline peaks, a narrow, steep walled ravine with slopes generally exceeding 25 percent. The Hollow broadens somewhat in the southeast corner where it is interspersed with small peaks and plateaus. At elevations above 900 feet, the landscape rises more sharply with severe slopes. Three peaks in Brandon exceed 1,500 feet in elevation with the maximum elevation at 2,345 feet.

The northeast corner of Brandon is characterized by the distinct Brandon Gap along Route 73 which provides the only paved access from Brandon to Goshen and Rochester. The Neshobe River formed and continues to shape this dramatic gateway into Brandon. The upper-central and central-northern regions of the town are of a more gentle terrain with rolling topography and several plateaus characteristic of the Champlain Lowland. With the exception of the eastern face of Lion Hill, slopes are generally moderate. Elevations range from 500 to 700 feet above sea level in this region.

Elevations

The Green Mountains, along the eastern border of Brandon, contain the town's most severe topography and highest elevations including the highest point in town -- 2345 feet. In addition to their scenic and recreational value, these areas provide a constant supply of fresh surface and groundwater. Because soils are usually shallow, the amount of surface runoff is high and restoration of vegetative cover is slow, the environment in areas above 1500 feet is very sensitive. Above 2500 feet it is considered extremely fragile. Slopes greater than 15 percent are found in the Green Mountains and in the Taconic Mountains in the southwestern portion of the town (Miller Hill is the northernmost point of the Taconics). Development in these areas usually results in erosion and stream siltation and can contribute to groundwater degradation because the potential for septic system failure and subsequent pollution is much greater. Development that can disturb fragile natural resources through removal of soil and vegetative cover on these slopes is incompatible with the sensitive water bearing qualities of this area. The Brandon Land Use Ordinance section on Slopes and Erosion is meant to prevent soil loss and protect natural and man made critical features such as neighboring properties, water courses, storm drainage systems, wetlands and natural areas from unstable slope / soil conditions, erosion and sedimentation resulting from construction earthwork.

Geology and Soils

The bedrock formations underlying Brandon consist of slates, phyllite and layers of marble and quartzite in the southwestern quadrant of the town. In the Champlain and Vermont valleys, carbonate rocks including sandstone, dolomitic limestone, and marble make up the bedrock, with bands of quartzite and marble in the foothills of the Green Mountains and schists and phyllites in higher elevations. Over the bedrock, the composition and depth of surface materials varies greatly and is primarily related to glacial action and topographical features. Glacial till

makes up much of the present surface cover. In the lowland area adjacent to Otter Creek, most of the original till material has been overlain with silt-clay alluvium, or lake sediment which was deposited during the post-glacial period. The maximum depth of this material is estimated at no more than 20 feet. In addition, the Brandon Delta is composed entirely of sand. Other sands and gravels were also deposited along the lower slopes of the upland region. The distributionof soils in Brandon has been mapped by the Natural Resource Conservation Service (NRCS) and the data is available to the public.

Mineral Resources

Brandon has a long history of quarrying and mining activities. Mineral resources include iron ore, marble, kaoline and lignite,. In the early 1800s, the extraction and processing of iron and marble were important Brandon industries. As many as six marble quarries operated in Brandon and produced rock with several distinct patterns. A rare paint stucco pink marble quarry once existed in this marble vein. Omya Inc. and Imerys, both mineral extraction companies, own several properties in town, and while the sites are not currently active, the companies maintain updated permits. At this time, the only actively extracted resources in Brandon are sand and gravel deposits.

The inactive Dram-Lead-Zinc Mine located south of Forest Dale contains galena, sphalerite and pyrite. Kaoline and lignite deposits are a rare occurrence not only in Vermont, but also within New England. Fossils were found in the McConnell Road mine. This area is now owned by the state.

Water Resources

Water Quality

Protecting the quality of the water, including both groundwater and surface waters, is an important part of the Town Plan. Water quality is protected in numerous ways including protection of groundwater source areas, regulation of on-site sewage systems, surface water setback requirements, floodplain regulations, vegetated buffer requirements, erosion control measures on steep slopes, and protection of wetlands.

Aquifer and Wellhead Protection

Brandon has established an Aquifer Protection area to protect water supplies of Fire Districts #1 and #2. Protection of the groundwater sources used for clusters of private drinking water supplies is also an important consideration. As additional aquifer(s) are identified and mapped, particular care should be given to protect them as well.

Brandon Fire District #1 has won the American Water Works Association (AWWA) Exemplary Source Water Protection Award for medium-sized systems during its Annual Conference & Exposition in Denver, Colorado, recognizing our source-protection efforts.[19]

In December 2011, Brandon Fire District #1 was the first public water system in Vermont to receive a Class II Groundwater Reclassification from the Agency of Natural Resources. Class II groundwater is suitable for public water supply use, has uniformly excellent character, is in use as a public water supply source or has a high probability for such use, and is exposed to activities which may pose a risk to its current or potential use as a public water supply source. That's why we can say we have the best water in the State!

Hydrology/Watersheds

Topography, geologic, and climatological factors greatly influence the hydrologic events of watersheds and drainage basins. A watershed is a specific area of land that drains water, sediment and dissolved materials into a river system or other body of water. A drainage basin is a watershed that collects and discharges surface stream flow through one outlet or mouth. Brandon is located in the Otter Creek Watershed, a major tributary to the Lake Champlain Basin. The Lake Champlain Basin drains areas covering approximately one-third of the state and includes towns in northern Bennington County, Rutland County, Addison, Chittenden, Washington, Franklin and Grand Isle Counties, as well as parts of Quebec and New York State. The Otter Creek watershed includes Otter Creek, the Neshobe River, Jones Brook, Watershed and the Sugar Hollow Brook, which all drain the western slopes of the Green Mountains.

Surface Waters

The Otter Creek, approximately 100 miles in length, is the longest flowing body of water in the state. Approximately nine of those miles are in Brandon, entering the town from Pittsford a mile west of Route 7, flowing north - northwest until it leaves the town near Route 73 in Sudbury. After a short stretch in Sudbury, the Creek reenters Brandon and flows north into Leicester. The stream gradient is extremely low between Proctor and Middlebury, hence a low flow rate for the Otter Creek along these reaches.

The Neshobe River, a tributary of Otter Creek and the second largest stream in Brandon, meanders southwesterly from headwaters in Goshen. Entering the town near Route 73 north of the center of Forest Dale, the river passes through the Village, cascading over two falls and continuing until its confluence with the Otter Creek. Brandon has adopted a Fluvial Erosion Hazard Area bylaw and map, which regulates development adjacent to Neshobe River Corridor.

Sugar Hollow Brook is the third largest stream in Brandon. It originates in the Green Mountain western slopes along the eastern border of the town. Flowing south, it collects water from

[19] This and the next paragraph, *see* http://vtruralwater.org/news/leaks/2013_summer.php

numerous smaller tributaries before leaving Brandon and passing into Pittsford. There it joins with Furnace Brook before entering the Otter Creek in Pittsford.

There are several other smaller brooks and streams which flow intermittently throughout the year. Included among them are Arnold Brook and Bresee Mill Brook. Several small ponds exist in Brandon. Spring Pond and Burnell Pond are located in the Forest Dale area, while Jones Mill Pond is situated between McConnell Road and US Route 7. Sugar Hollow Pond is greater than 20 acres in surface area and one-half of it is located in Pittsford.

Wetlands

Wetlands are land areas that are saturated with water at least part of the year and include marshes, swamps, sloughs, fens, mud flats and bogs. Wetlands provide important wildlife habitat, but also provide other benefits such as storing storm water runoff, purifying surface and groundwater supplies, recharging aquifers, controlling erosion, and providing areas for recreation.

Brandon has extensive, significant wetlands. In recognition of the importance of wetlands, the State of Vermont has adopted Wetland Rules governing activity and development in designated wetlands. The Vermont Wetland Rules divide wetlands into two classes with Class I wetlands being the most significant. Scanlon Bog, a Class 2 wetland, is located east of Town Farm Road and should be considered for Class I designation. A portion of this natural area is owned by The Nature Conservancy, an organization dedicated to the protection of important natural resources. It is an exceptional and irreplaceable example of bog habitat (quaking bog), providing easy access for public viewing and educational research.

Wetlands are unsuitable for building construction and onsite septic systems, but they protect and enhance water quality and shoreline areas. Wetlands buffer shorelines from wave impact, slow stormwater runoff from uplands, remove phosphorus from the water during spring and summer growth periods and provide wildlife habitat. Wetlands slow and capture stormwater runoff storing it for recharge of springs and streams or the wetlands themselves at a later time. Wetlands should be included in a conservation or resource protection district and no development should be allowed in, or adjacent to, these areas.

Wildlife and Vegetation

A large variety of wildlife and native vegetation inhabit the land and waters in Brandon. The Vermont Fish and Wildlife Department has produced inventories and maps of the significant natural areas. The various species and their habitat include black bear production and seasonal habitat, deer wintering areas and deer yards. Rare plant and animal sites native to Vermont have been identified by the Natural Heritage program. Important wildlife corridors will be protected or conserved from encroaching development and incompatible activities, such as road expansion or development of new roads. These resources will be given high priority in considering lands for acquisition or other long-term conservation efforts.

State-owned natural areas include the Brandon Swamp Wildlife Management Area in the northwest with access from Leicester. The Brandon Town Forest, originally a portion of the Shirley Farr Trust, is on the eastern boundary. The Nature Conservancy also owns several parcels of conserved land in Brandon, including the Scanlon Bog, a significant Class 2 wetland in the northeastern part of town.

The Brandon Swamp Wildlife Management Area (WMA) is a 278-acre parcel owned by the State of Vermont and managed by the Vermont Fish &Wildlife Department. It is located in the towns of Brandon and Leicester, with the majority of the land being in Brandon. The WMA is bordered by Otter Creek to the east and the Brandon-Sudbury, Brandon-Whiting town lines to the west. Brandon Swamp WMA is a large floodplain swamp with cedar ringed by red maple-black ash hardwoods. It is one of the State's larger wetland complexes. The red maple-northern white cedar swamp is mossy and hummocky, with hidden pools. Cedar is dense in the center. In the riparian areas, there are silver maple, willow, elm, basswood and cottonwood. Former agricultural fields lay alongside Otter Creek. Approximately 1.5 miles of the Otter Creek streambank is included in this WMA. Mosquitoes are dense in season. Access across the WMA is difficult, and by foot or boat only.

The old Silver Mines site, off Birch Hill Road, is a significant natural area. Early unsuccessful mining operations in the 1800s left many caverns or pits which now support diverse fern colonies. The area represents one of the prime natural areas in the northeast for fern habitat. Some of the numerous species it sustains are rare or endangered. Owned in part by The Nature Conservancy, it is an exceptional and valuable natural area both for preservation and education/research.

Agricultural and Forest Land

Agriculture and silviculture are not only important economic activities in Vermont, but also are the foundation of a highly valued rural lifestyle and a significant factor in the shaping of the landscape. There are 3,812.3 acres of agriculture and forest land, approximately 15 percent of the total land area, in the Use Value Assessment Program[20] in Brandon.

Land capable of supporting agricultural uses requires prime agricultural soils as well as moderate slopes, adequate parcel size, and access. There are few farms left in Brandon. There are a total of 1,014 acres in Brandon, including several significant parcels at the junction of McConnell Road and Route 7, on which the Vermont Land Trust holds conservation easements and which are used for various agricultural purposes. Brandon has several agri-tourism businesses which feature animals as diverse as goats and alpacas.

[20] Source: Brandon Listers' Office. The Use Value Assessment Program provides an incentive to owners to keep their parcels as woodlots or agricultural land in the form of a lower tax rate based on use value, not full market value.

Like agriculture, forestry is an important activity in the state and region. Lands capable of supporting forests are critical to the support of silviculture as well as providing wildlife habitat and places for recreation. Brandon has a considerable amount of preserved forestlands.

Part of the Green Mountain National Forest is located in Brandon along Leicester Hollow Brook where it joins the Neshobe River. A portion of the forest north of Forest Dale was designated a Management Area in the 1986 Land and Resource Management Plan for the Green Mountain National Forest and earned Congressional designation as the Moosalamoo National Recreation Area in 2007.

The Brandon Town Forest is located along Brandon's eastern border with Goshen and Chittenden, and contains about 291.2 acres. The forest provides protected wildlife habitat, dispersed and relatively undeveloped recreational opportunities (such as hiking and hunting), and also serves to protect the watershed. A management plan was written for the forest which promotes this valuable resource's long-term sustainability and productivity.

The High Pond Nature Reserve, close to the western border with Sudbury, also contains protected woodlands and is now conserved by The Nature Conservancy.

Scenic and Aesthetic Resources

The Brandon "streetscape" is a combination of natural and human-made scenic resources and a significant source of community identity. Scenic resources, including farms, open pastures, woodlands and streams, as well as historic homes, barns, inns and towering church spires, have aesthetic, historical and economic value to the community. A number of elements, such as tree-lined streets, green space and parks, sidewalks, flower gardens, and park benches all add to the quality of life in Brandon.

Conservation Areas

Conservation areas within Brandon are those lands that contain natural features or natural limitations that reduce the ability of the land to support extensive development.

Because of the severity of their limitations or natural significance, some conservation areas are more sensitive to disturbance than others. The areas identified as being most severely limited are: Scanlon Bog, Smalley Swamp, Arnold Brook Swamp, Long Swamp, Brandon Swamp, the Otter Creek and Neshobe River floodways, habitat of flora or fauna which are designated as threatened or endangered, and all lands above 1500 feet in elevation. It is recommended that these areas remain as open land. Allowable uses should be: agriculture (with Acceptable Agricultural Practices at a minimum, and preferably with Best Management Practices), forestry (with Acceptable Management Practices), recreation uses which do not require the use of pesticides or herbicides, and non-structural public uses. New residential, commercial, and industrial uses, including solar arrays, are strongly discouraged in these areas.

Conservation areas outside of the above have constraints on development such as steep slopes, shallow soils, wetlands, prime agricultural soils and floodplain outside the floodway. Some are constrained by distance from good roads or other poor access issues. The town's policy is to orient growth toward areas that can best accommodate development (for example, with good access and few if any environmental limitations), and therefore these areas are envisioned to retain their open character. Environmentally sensitive, clustered development may be reviewed for conditional approval based upon its ability to incorporate the conservation design concepts noted below.

Action steps

Physiography

- Development should be prohibited in areas where the slopes exceed 20 percent and should be avoided in areas where the slopes are greater than 15 percent.
- Elevations above 1,500 feet should be protected from intensive uses and development.
- Regulations intended to protect the scenic value of visible mountaintops and ridgelines should be implemented.

Geology and Soils

- Unique geologic areas should be protected from uses that would destroy their resource or recreational value.
- Existing sand and gravel operations should be permitted to continue operation subject to appropriate conditions relative to surrounding residential uses, and to mitigation of impacts on wetlands, aquifers, streams and ponds. When extraction operations cease, the land should be properly reclaimed so that, at a minimum, it may serve as passive open space.
- Prime agricultural soils should be given high priority for protection under Act 250 considerations.
- Companies or contractors engaging in transportation and extraction of resources should pay their fair share of costs associated with the activity.

Water Resources

- Protect surface waters and ground water from development and uses that would reduce water quality.
- Wetland areas shall be retained in their natural state for the provision of wildlife habitats, retention areas for surface runoff, recreation, and resource value.

- Shorelines and streambanks, including buffer strips, shall be protected from uses, reclamation and development which would cause erosion, prohibit public access, or reduce scenic qualities.
- Work to secure and maintain public access to the Otter Creek and Neshobe River within the town boundaries for recreational uses such as canoeing, kayaking, and fishing.
- Encourage volunteers to keep these waterways clear for use and to prevent flood hazards. Take appropriate actions to preserve water quality.
- All wetlands should be protected to the maximum extent (beyond state and federal regulations).
- Include low-impact development incentives and requirements in zoning for the built environment.
- The Select Board will use the Neshobe River Corridor Plan's identification of potential riparian easement sites to identify and work with willing landowners to establish conservation sites along the river to prevent future development in flood-prone locations.

Wildlife and Vegetation

- Wildlife habitats such as wetlands, deer yards, and surface water, shall be protected and buffered from uses and development that would reduce their vital function.
- Identify and protect a functional, interconnected system of habitats. Minimize the impacts of development on the system of interconnected habitats as well as on individual areas of biological significance.
- Revisit the writing and implementation of a Brandon Town Forest Management Plan.
- Encourage clustering of development in order to allow viable amounts and patterns of undisturbed and/or open land.

Agricultural and Forest Resources

- Encourage proper woodland management, reduce fragmentation of large forest blocks, and encourage connection/linkages of woodland areas.
- Preserve farm and forest lands and maintain the working landscape through conservation, easements, tax incentives, and land acquisition.
- Discourage development within significant agricultural and forested areas. Development of lands with resource value for woodland or agriculture should occur in patterns and densities that will not substantially reduce the productivity of the land. Clustering or other innovative techniques are strongly encouraged to reduce the impacts of development.

- Require forest management plan development and implementation where significant land conversion is proposed.
- Agricultural land should remain open for future agricultural operations.

Scenic and Aesthetic Resources

- Encourage development that complements or enhances the scenic quality of the Brandon landscape.
- Scenic and aesthetic resources should be protected and maintained.
- Evaluate the location of utility lines and facilities, encourage burying of lines in public rights-of-way, and require screening of energy production facilities to the extent allowed by law.
- Discourage light pollution from exterior lighting of streets, parking and signage by encouraging energy efficient, shielded non-glare lights.
- Update the inventory of the trees that line the streets of the villages, including their type, size and health. Assist and encourage the maintenance of these trees and develop a program to fund the replacement of those that are diseased and/or dying.
- Discourage removal of healthy mature trees on construction, public works, highway or redevelopment sites.

FLOOD RESILIENCE

24 V.S.A. §4382 (12)(A): A flood resilience plan that:

> *(i) identifies flood hazard and fluvial erosion hazard areas, based on river corridor maps provided by the Secretary of Natural Resources pursuant to 10 V.S.A. § 1428(a) or maps recommended by the Secretary, and designates those areas to be protected, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forests, to reduce the risk of flood damage to infrastructure and improved property; and*
>
> *(ii) recommends policies and strategies to protect the areas identified and designated under subdivision (12)(A)(i) of this subsection and to mitigate risks to public safety, critical infrastructure, historic structures, and municipal investments.*

(B) A flood resilience plan may reference an existing local hazard mitigation plan approved under 44 C.F.R. § 201.6.

Background

Tropical Storm Irene in 2011 and major flooding events both before and after prompted the Legislature, Regional Planning Commission, and others to re-examine Vermont's relationship with water and how development can cause, increase, or decrease the effects of flooding and fluvial (river) erosion. General information regarding Brandon's watershed topography and response to flooding threats is contained in the Natural Resources section of this Plan, in addition to the following.

Floodplains

A floodplain is the flat land adjacent to rivers and streams that is periodically inundated to varying depths during periods of high water. Small floods tend to be more frequent than large ones. The 100-year flood frequency is used as the standard for delineating flood hazard areas by the Federal Insurance Administration. The 100 year flood will have a one percent chance of being equaled or exceeded in any given year. The 1927 flood is estimated to be a 100-year frequency and was used as a standard for mapping Rutland region floodplains. Extensive floodplains exist in Brandon in the central and western portion of the town and have been mapped by the federal government.

Response

Flood Hazard Areas are identified on Natural Resources Map 1 of 2.

The town also has adopted an All-Hazard Mitigation Plan (approved by FEMA in October 2012) which identifies all hazards, including specifically flood hazard areas and fluvial erosion hazard areas and includes recommended policies and plans, programs, projects and activities, including mitigation and preparedness actions, and strategies to protect these areas. The town has adopted comprehensive floodplain management and fluvial erosion hazard policies.

The most cost-effective way for the Town of Brandon to mitigate flood hazards is avoidance: limiting building and other investments in river corridors. In addition to preventing future flood losses to structures built in hazardous areas, this approach avoids constraining a river, allowing the stream or river, over time, to become more stable. Statute 24 V.S.A. §4424 specifically authorizes towns to adopt zoning for shorelines, floodplains, and other hazardous areas, including fluvial erosion zones.

Goal

Mitigate and eliminate risks to public safety, critical infrastructure, historic structures, and municipal investments posed by flooding and fluvial erosion.

Policies

- Minimize development in river corridors.
- Protect and restore river corridors, floodplains, wetlands, and upland forested areas that attenuate and moderate flooding and fluvial erosion.
- Stormwater retention practices should be required of any new development that creates more than an additional one-quarter acre of impervious surface.
- New development in floodplains and river corridors (fluvial erosion hazard areas) identified on the Natural Resource and Fluvial Erosion Hazard Area Maps shall not exacerbate flooding and fluvial erosion, and is to be avoided.

Action steps

- Maintain, update and implement the Local Emergency Operations Plan that encourages flood emergency preparedness, including Incident Command System trainings.
- Continue to comply with the National Flood Insurance Program and work to achieve Community Rating System classification.
- Maintain, update and implement policies and recommendations in the Town of Brandon All-Hazard Mitigation Plan specific to flooding and fluvial erosion.
- The Select Board and Planning Commission shall work together to identify project recommendations from the Vermont Economic Resiliency Initiative ("VERI") report to be implemented via amendments to the Town of Brandon All-Hazard Mitigation Plan.

TRANSPORTATION

24 V.S.A. § 4382(3): A transportation plan, consisting of a map and statement of present and prospective transportation and circulation facilities showing existing and proposed highways and streets by type and character of improvement, and where pertinent, parking facilities, transit routes, terminals, bicycle paths and trails, scenic roads, airports, railroads, and port facilities, and other similar facilities or uses, with indications of priority of need.

Introduction

A good transportation system, facilitating accessibility and the movement of people and goods within and through Brandon, contributes to a high quality of life. The transportation plan must be considered in terms of its environmental and social impacts and in conjunction with other elements of this Town Plan. Transportation is vital to economic development, as well as being a significant user of energy. Any planning associated with transportation should take into consideration and make efforts to facilitate economic development and minimize energy consumption.

Accomplishment

More downtown parking through the voter-approved purchase of a lot near Town Hall.

Goal

To support provision of an accessible, cost-effective, balanced transportation system that meets the needs of Brandon residents and businesses while providing through movement of people and goods.

Policies

- Plan for and encourage the development of transportation facilities designed for multiple modes of transportation.
- Improve traffic flow and parking capacity in Brandon while balancing other objectives such as maintaining downtown's historic character and vitality.
- Maintain and improve conditions of and access to existing transportation infrastructure.
- Support regional efforts to provide public transportation to all, for example, with bus routes and passenger rail service.

Background

The evolution of Brandon's transportation system mirrors that of many towns in Vermont. Trails created by wildlife, Native Americans, and early settlers became roadways. Railroad service blossomed and faded, and 20th century society became heavily dependent on automobile and truck transportation.

Transportation is one of the highest areas of energy use in Vermont. In order to lessen the adverse impact of car and truck use, more choice and diversity in transportation modes is necessary. The highway and bridge system upon which society depends needs to be maintained.

Highways and Roads

Highways constitute the most significant component of Brandon's existing transportation system, providing paths for public transportation and bicycles and pedestrians as well as automobiles and trucks. They are identified by their functional classification (major arterial, minor arterial, collector, local street, etc. US Route 7, a principal arterial, is the most heavily traveled road in Brandon. It serves the western side of the State for long distance through-traffic as well as local trips. Roads such as Arnold District Road and Country Club Road are considered to be local streets, providing access to individual parcels of land, although they also function as secondary through roads. Town highways are, by State legislation, also categorized by their administrative class. There are 70.7 miles of roads in the Town of Brandon, 12.9 miles of which are State highways. The function and administrative classification of roads should be a consideration when planning for growth.

Highway Traffic Volumes

The number of vehicles using a highway affects many decisions about the highway itself as well as land use planning for adjacent land. The most common way to describe traffic volumes is the Average Annual Daily Traffic or AADT. The AADT represents the total traffic volume passing a point of a highway for one year divided by the number of days in the year (total both directions). In Brandon, the highest volume is on US Route 7, especially in the village area (approximately 10,000+). Lower volumes occur on VT 73 (1,300 – 4,000 vehicles). Town highways, such as Arnold District Road and McConnell Road, show much lower volumes, close to 1,000 vehicles or less. In general, none of the volumes, with the exception of those on US Route 7 in the village, appear excessively high, and all are below design capacity.

Infrastructure Conditions

In general, paved town highways in Brandon are adequately maintained and the town maintains gravel roads to a satisfactory standard. However, several roads in Brandon are in need of better maintenance. Overweight vehicle traffic, both on Route 7 and on town roads, is causing premature deterioration of road surfaces. Whenever gravel roads begin to carry heavy traffic, in the AADT range of 400 - 1,000 vehicles, they should be considered for paving. This should be done depending upon other factors, such as availability of funds, and provision of an adequate base and drainage.

The Town has a computerized, graphic information-based inventory of culverts. It is important for capital planning that this be maintained and kept up-to-date.

High Accident Locations (HAL)

Another way to identify deficiencies in the highway network is to examine accident records to ascertain locations where there appear to be more accidents than would normally be expected. US Route 7 in the village has been identified as a primary site, in addition to less frequent and severe locations on McConnell Road and Carver Street. Geometric features at those locations are often deficient and should be considered for improvement. The configuration of US Route 7, with its sharp turns, vertical curves and limited sight distances, all contribute to accident rates.

Pittsford-Brandon US 7 Upgrade (Project ID - NH 019-3(49))

The goal of this project is to provide an attractive, safe, and efficient transportation corridor with improved pedestrian and vehicular safety and enhanced mobility along US Route 7 through the Towns of Pittsford and Brandon. This project includes shoulder widening and roadway reconstruction, construction of truck climbing lanes and reconstruction of intersections, as well as drainage improvements, landscaping, utilities, relocations, and safety improvements. Modifications in downtown Brandon involve a substantial rearrangement of the road as it passes around Central Park. The changes are intended to improve the flow of through-traffic while still providing for local parking and pedestrian use in front of Park Street businesses and the Brandon Inn. The Town has expressed strong support for this project.

Bridges

The ownership of bridges determines responsibility for their maintenance. Bridges with spans of 20 feet or more are generally eligible for federal support, while bridges (or culverts) with spans greater than six feet but less than 20 feet are generally eligible for state funding. Brandon has a total of 22 bridges – eleven over 20 feet long and eleven less than 20 feet.

The condition of local and state bridges is evaluated regularly by the Vermont Agency of Transportation. Using a system developed by the federal government, bridges are given a rating of between 0 and 100. Bridges with scores of less than 70 are considered eligible for federal funding. Brandon currently has eight bridges below the rating of 70. New project candidates are suggested to the Agency of Transportation by the Regional Planning Commission during their annual prioritization process and these bridges should be on that list.

Parking

In the downtown area, many residents and merchants feel that parking is a recognized problem that must be addressed. Municipal parking added behind the Center Street stores, as well as the voter-approved purchase of a lot near Town Hall mean an increased number of available spaces that is adequate to present need. Nevertheless, any parking requirements contained in zoning regulations, should be aligned to reasonable expectations and necessity for availability of parking downtown and elsewhere.

Park and Ride

Brandon's first municipal Park-and-Ride was established at Estabrook Field in 2008. This area serves as the pick-up/drop-off location for both commuter buses**.**

Development of New Roads

New roads serving residential and commercial development should be planned and constructed in a fashion that adheres to state and town land use ordinances as well as the town's road standards. Access, circulation and design review must be carried out according to town standards in order to protect the interests of the public and the town**.**

No new town highways are expected to be adopted. In addition, the current road infrastructure adequately serves Brandon's residential and commercial needs. No new construction is anticipated.

Access Management

Almost all roads serve two important functions: the provision of access to adjacent land, and as travel-ways for through-traffic going past the land adjacent to the road. The two functions conflict because the turning movements necessary to access adjacent land impede through-traffic, and through-traffic reduces the ability of local traffic to get on and off the roadway.

The goal of access management is to achieve a safe and efficient flow of traffic along a roadway while preserving access to abutting properties. When carried out properly, access management balances mobility and access. In Vermont, access design standards and regulations are ideally a cooperative effort between local zoning and planning officials and the state's Agency of Transportation for State roads. Control and regulation of the spacing and design of driveways and streets, medians and median openings, and traffic signals are the primary means by which access management is carried out.

In Brandon, the need for access management is most clearly visible along US Route 7 as it carries the heaviest volume~~s~~ of traffic. This is particularly important in the vicinity of intersections such as McConnell Road where a variety of uses exist, and therefore curb cuts have been developed. Consolidation of access points is needed and where appropriate, measures should also be designed to improve pedestrian access.

Other Transportation Modes

Although highways and personal automobiles dominate the local transportation network, other modes of transportation are increasingly important in providing access to the people of Brandon.

Air

Rutland Southern Vermont Regional Airport is located south of Rutland in North Clarendon, 23 miles south of Brandon. It is one of the largest state-owned airports in Vermont and the only state-owned airport with scheduled passenger service. The airport has two runways (1-19 and 13-31) and offers three daily flights to Boston. There are also major commercial passenger and cargo services available at Burlington International Airport in Vermont, Albany International Airport in New York, and Manchester Airport in New Hampshire.

Bicycle and Pedestrian Facilities

Bicycle and pedestrian travel are critical elements in creating a balanced and sustainable transportation system. Health, safety and energy conservation are just a few of the benefits of these alternative means of transportation. The schools should participate in the Safe Routes to School Program, which educates and encourages walking and biking to school.

As of 2008 there were no designated bike paths or bike lanes in Brandon. At one time bike paths were proposed to Otter Valley Union High School and Neshobe School but they were never constructed due to costs. All significant future development should require bike lanes within the development which connect to existing transportation infrastructure.

The most heavily used pedestrian area is downtown Brandon. Safe pedestrian routes are needed between neighborhoods, commercial and industrial areas, and community centers. Existing sidewalks should be connected and upgraded and additional sidewalks should be promoted. Visibility at all crosswalks should be maintained. All significant future development should require sidewalks and appropriate crosswalks with curb cuts for handicap accessibility. This type of infrastructure should be created as a requirement of new planned residential developments.

Public Transportation

Public and private transit services are an important component of the transportation system. Not only does public transportation decrease the number of vehicles on highways, it provides an essential service to the elderly, disabled and handicapped. The Marble Valley Regional Transit District (MVRTD or, “The Bus”) in the Rutland region in conjunction with Addison County Transit from Middlebury currently provides fixed-route service to Brandon from the north and south. The Town directly participates with MVRTD and human service agencies in the public transportation program, assuring that bus and paratransit service is

provided for the elderly, disabled, and all residents. Efforts to coordinate and expand transit service, especially to citizens who are dependent on public transit, should continue to be supported.

Rail

An active rail line, operated by the Vermont Railway, runs parallel with US Route 7 through Brandon on the west side. Currently only freight is regularly carried over the line. A proposal was made for a spur from the current railway to Middlebury which would carry freight and ultimately decrease the number of trucks on US Route 7, but that proposal (the "Middlebury Rail Spur") appears to have faltered.

On the other hand, plans are being made for a return of passenger rail service from Rutland to Burlington and onto Montreal. Brandon energetically supports this initiative and hopes to obtain a "whistle-stop" on the line to provide access to service from Brandon.

Impact of Regional Transportation Element

The transportation element of the Rutland Regional Plan influences and is influenced by local transportation decisions. In addition, State funding and projects within the town of Brandon are prioritized on regional and statewide levels. The Town's continued participation in development of the regional transportation plan and priorities is very important.

Action steps

- The Town will encourage use of Brandon's municipal Park-and-Ride lot.
- The Planning Commission will explore the potential for new Park-and-Ride sites and expansion of existing sites.
- Zoning will require bike paths or lanes in all significant new construction
- Zoning will require sidewalks in all significant new construction.
- The Select Board and Town Manager will prioritize maintenance of roads and bridges throughout Brandon.
- The Department of Public Works will maintain a current inventory of infrastructure.
- The Town will designate and maintain safe crosswalks of US Route 7 at all appropriate locations.
- The Police Department will enforce speed and weight limits on all roads
- The Planning Commission will promulgate regulatory and nonregulatory instruments to coordinate planning and development with regard to the link between land use and transportation.

- New development along class 4 highways and unmaintained roadways should be discouraged unless there is a roadway improvement and maintenance plan with funding for the plan in place.
- The Town will seek to implement an eco-friendly shuttle service between ParkVillage, Downtown, and Forest Dale.

FUTURE LAND USE

24 V.S.A. § 4382(2): A land use plan:

(A) consisting of a map and statement of present and prospective land uses, indicating those areas proposed for forests, recreation, agriculture (using the agricultural lands identification process established in 6 V.S.A. § 8), residence, commerce, industry, public, and semi-public uses and open spaces reserved for flood plain, wetland protection, or other conservation purposes;

(B) setting forth the present and prospective location, amount, intensity, and character of such land uses and the appropriate timing or sequence of land development activities in relation to the provision of necessary community facilities and service; and

(C) identifying those areas, if any, proposed for designation under chapter 76A of this title, together with, for each area proposed for designation, an explanation of how the designation would further the plan's goals and the goals of section 4302 of this title, and how the area meets the requirements for the type of designation to be sought;

Introduction

The Town of Brandon must balance preservation of its community and character and conservation of its resources with support of opportunities for economic growth in order to sustain the town's citizens and services. This Plan provides guidance for future growth and development. Brandon encourages planned growth and concentrated development in those areas of the town which provide for higher density and which can develop the necessary infrastructure to more readily support development than other sections of town. This policy is consistent with the direction provided in Vermont's planning laws (24 V.S.A. Chapter 117). Future growth should be concentrated in existing areas of development; as well as being oriented toward infill areas, making maximum use of existing infrastructure.

Goal

To encourage strategic growth and economic development while protecting existing natural, scenic, and historical resources.

Policies

- Recognize the town's cultural resources and historic settlement pattern as a significant, non-renewable resource that creates a sense of place and community wellbeing.
- Maintain a land use pattern of relatively densely settled villages and clustered development radiating from the town center which may be efficiently served by community facilities and services. Residential development should be clustered using smaller lots for development in order to maintain a range of other open space uses.
- Protect the integrity of the community and existing neighborhoods by encouraging the preservation and renovation of existing housing stock.
- Preserve and revitalize existing historic streetscapes.

- Identify, protect, and preserve the valuable natural areas within Brandon. Support and ensure the long-term protection of natural resources.
- Recognize the links between land use, energy consumption, and transportation and coordinate their planning and development.

Existing Development

The Town of Brandon contains a distinct, historic downtown or 'village' area that straddles the Neshobe River. In or adjacent to the Designated Downtown, there are four greens, four churches, municipal buildings, a variety of stores, offices, restaurants, and several inns. Another long-standing cluster of development exists northeast of downtown in Forest Dale. There, businesses, the town's elementary school, two churches, the Senior Citizen's Center, a golf course, and two general stores are interspersed amidst residential development, much of which is historic. Just northwest of the downtown is Park Village, a campus of mixed business and residential uses. It is adjacent to the Industrial Park. These clusters of development are surrounded by generally open, rural and forested land with residential and non-residential uses.

Brandon's current land use districts include Aquifer, Central Business, High Density Multi-Use, Neighborhood Residential, and Rural Development. For zoning purposes, the boundaries of each District are indicated on the official Land Use District Map posted in the Brandon Town Offices. Full explanations and requirements of each district are outlined in the Brandon Land Use Ordinance.

The Aquifer District encompasses those lands that provide the water sources and storage for wells maintained by municipal fire districts.

The Central Business District serves as the commercial center of the Town by providing a wide variety of small shops and commercial uses within convenient walking distance. This historic core of the village, along US Route 7, is an area labeled the Central Business District. It is recommended that the current mix of retail shops, public facilities and institutions, (for example, town offices and churches), offices and some residential uses on upper levels, be continued and supported. Appropriate reuse of vacant or underused existing structures is the preferred means by which new growth should be accommodated and is strongly encouraged. New infill development should respect the historic character and function of the area. Efforts to enhance the pedestrian-friendly character are encouraged. The existing density should be maintained or slightly increased in order to support the vitality of the Central Business District.

Neighborhood Residential Districts are those set aside primarily for residential and other uses that are compatible with and which contribute to the viability of such neighborhoods. They surround the village core, generally along the roads which radiate from the center of town such as Park, Union, Pearl, Seminary, Carver and Prospect Streets,. They are served by public water and sewer and have good access for emergency services. Non-residential uses such as corner stores and small offices that can rely primarily on foot traffic rather than generating new traffic and parking needs may be allowed subject to public review. Infill development and non-

residential uses should support the residential character of these areas. When constraints allow, existing densities of up to four dwelling units per acre should be replicated on any vacant or underused land.

High Density Multi-Use Districts (HDMU) are designated for concentrated mixed use development. Uses that require a large amount of space or those that could compromise the viability of allowed development are either prohibited or subject to the conditional use process. HDMUs are areas that are served by public water and sewer and also have direct access to arterial or major collector streets. They are primarily located outside but connected to the village, along Grove Street and Forest Dale Road/VT 73. There are six smaller areas in the village: off Union Street in the vicinity of the railroad tracks, on the west side of Carver Street just east of the industrial area, in the general vicinity of the Hannaford supermarket, along Conant Square just west of Prospect Street and between Seminary Street and the river northeast of the Town Hall. In these areas, a variety of residential, commercial, agricultural, recreational and public uses are allowed. Design measures to assure peaceful coexistence between differing uses should be employed; these should include landscaping, access consolidation, building design details, noise and lighting management and other methods to promote compatibility. Densities of up to four units per acre, similar to the Neighborhood Residential areas, should be maintained.

Rural Development Districts include those lands that have been determined to be unsuitable for extensive development because of their ecological or topographical characteristics, the unavailability or inadequacy of public infrastructure, or reduced growth planning considerations. The minimum number of acres per dwelling unit in the Rural Development is two.

The Brandon Planning Commission has determined a need to replace Brandon's use-based zoning, which is based on historical model legislation that was ill-fitted to Vermont generally and Brandon in particular. The current zoning ordinance, written in 1996, is a bloated 83 page tome that citizens broadly agree is in dire need of rethinking and rewriting.

Therefore, the Brandon Planning Commission shall adopt a Brandon-Based Code that meets state requirements for zoning bylaws while reflecting Brandon's unique architecture, settlement patterns, and values – that is, its "character."

Future Development

To be consistent with the goals outlined in this Plan, future growth shall be guided into already developed areas as much as possible. Brandon has a Downtown Designation from the State of Vermont. The designation is up for renewal in 2017 and it is the intent of the town to actively seek and maintain this designation. Forest Dale residents are seeking a Village Designation under 24 V.S.A. § 4404. Village Designations are a means for building on such existing patterns of development. In addition, Park Village is organizing a community association aimed at promoting development within that special district.

Land that contains natural constraints on development (steep slopes, floodplain, aquifers, etc.) shall not be developed unless adverse impacts can be adequately prevented or mitigated. In developed areas, the appropriate reuse of existing buildings is the preferred method of accommodating new uses. Redevelopment may be appropriate where existing structures are unsound or unsuitable. If new construction is proposed, it shall be of a location, scale, site plan, and design that complements and enhances existing, conforming development. The Future Land Use Map shall be a blueprint of future growth in Brandon (see Figure 2).

Action steps

- Redefine zoning of the area surrounding the Route 7 / McConnell Road intersection to prevent encroaching sprawl.
- Require future development to include the cost (borne by the developer) of infrastructure and lights.
- Hold an open forum focusing on the vision for future development of Forest Dale.
- Actively investigate the potential for development of a new or upgraded grocery store in Brandon.
- Encourage greater infill development along the Park Village utility corridors.
- Consider incentives to promote reuse of existing buildings, through land use regulation, permitting, and tax incentives such as tax stabilization.
- Continue efforts to revitalize downtown Brandon.
- Maintain improvements to the visual appearance of downtown which accommodate both the historical and modern needs of the village area.
- Promote conservation design by organizing development outside the villages around the characteristics of the landscape.
- With reference to the VERI report and other sections of this Plan, the Planning Commission and Select Board, in consultation with appropriate town staff will develop and implement a capital budget plan.

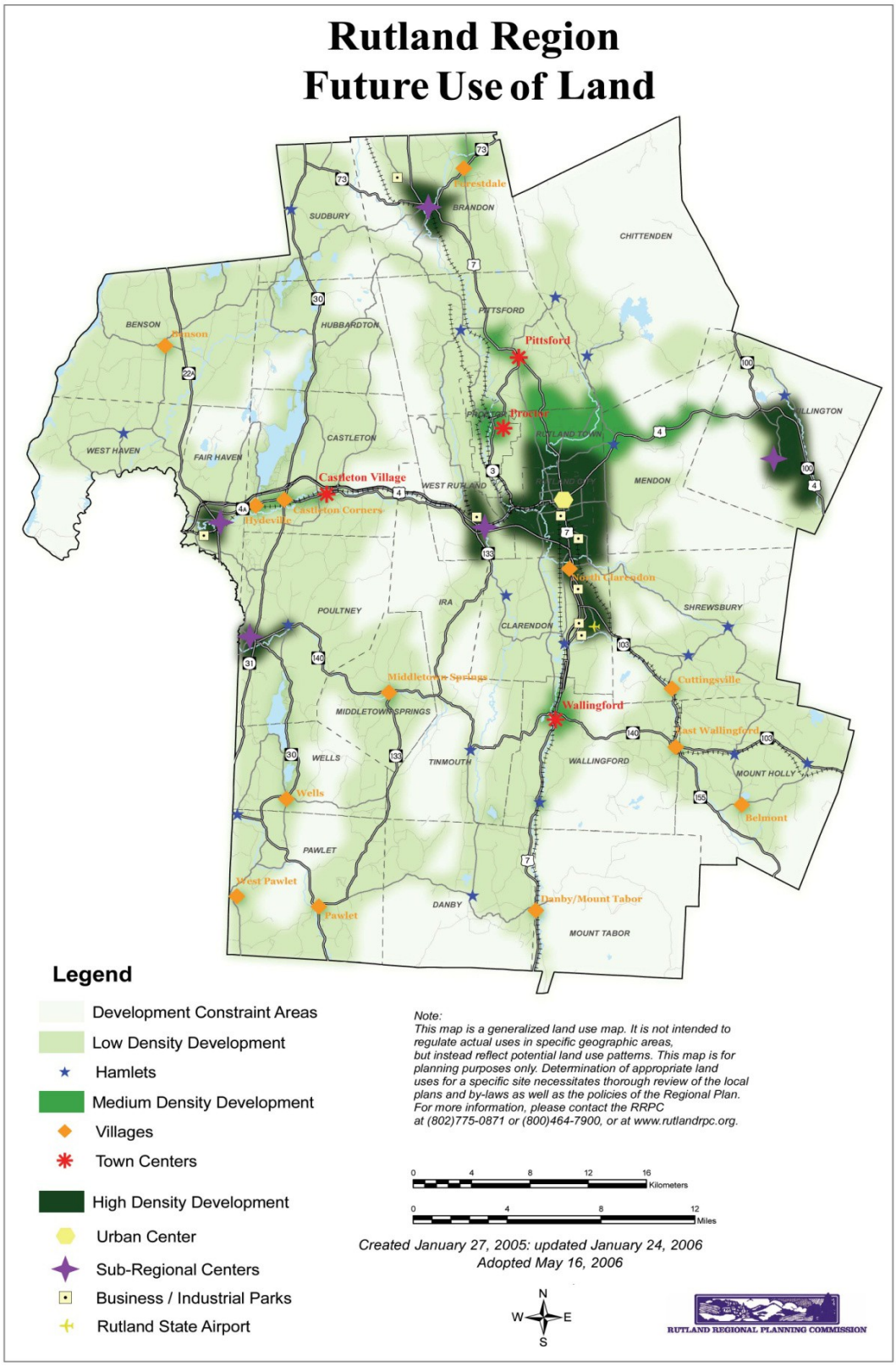

Figure 2. Future Land Use map adopted in the Rutland Regional Plan (2006)

Consistency with Adjacent Town Plans

24 V.S.A. § 4382 (8): A statement indicating how the plan relates to development trends and plans for adjacent municipalities, areas and the region developed under this title;

Brandon's future land use plan is consistent with plans developed by adjacent communities in the following ways:

To the west, the Town of Sudbury's land use plan acknowledges the presence of existing environmental conditions (i.e. extensive floodplain and wetlands in the vicinity of the Brandon/Sudbury boundary) and therefore also recommends low density residential and/or conservation uses.

To the North, the plan for the Town of Leicester (in Addison County) is similar to Brandon's in that it generally recommends conservation lands in the far eastern and western portions of the town and low density residential and/or agricultural uses in the central part. Leicester's town plan map also designates both sides of US Route 7 as planned for residential, agricultural and commercial uses.

The Town of Goshen, to the northeast (in Addison County), plans forest and conservation uses in the area adjacent to Brandon.

Chittenden, to the southeast, is currently considering adoption of a new town plan.

To the south, the Town of Pittsford recommends conservation uses in the western and eastern portions of the town and rural uses in the central portion.

CONCLUSION AND IMPLEMENTATION

A number of themes emerge when considering the various action steps made in this Plan. In several instances, action steps were made requiring infrastructure (sidewalks, traffic lights, bike paths) as a condition of new construction. Adaptive reuse of existing buildings is another theme that appeared in several functional areas (for example, as a historic preservation strategy, as an economic development strategy, and as a future land use recommendation.) Protection of natural assets (aquifers, forest management, wildlife habitats, and conservation areas) is a priority in terms of the Town's cultural, recreation and natural resources. Clustered housing development was yet another common theme in several functional areas. In terms of housing and future land use, for example, clustered housing development is an efficient way to protect open spaces, increase densities in existing developed areas and promote the adaptation and reuse of existing homes and structures.

Finally, greater emphasis on the connection between land use and transportation occurred as a priority in several areas. Cited in the energy, economic development, transportation and future land use sections, stronger linkages between land use and transportation will facilitate greater density and energy efficiency in developed areas, while protecting conservation lands and natural assets. These reoccurring themes, combined with the action steps made throughout the Plan, are a template for the future.

Implementation of the Plan will require both public and private sector involvement and cooperation. Analysis of existing ordinances for their consistency with the goals and Policies in this Plan is the next step, followed by modification of any regulation that may need adjustment. The Select Board may choose to develop a workplan outlining the time frame during which specific actions will be carried out.

A well-defined work plan will operationalize the recommendations of this Town Plan. Public participation will ensure success.