



# Town of Brandon

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Department of Housing  
and Community Development

March 6, 2014

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Chair, Pittsford Planning Commission  
Chair, Goshen Planning Commission  
Chair, Leicester Planning Commission  
Chair, Sudbury Planning Commission  
Chair, Hubbardton Planning Commission  
Executive Director, Rutland Regional Planning Commission  
Department of Economics, Housing and Community Development  
within the Agency of Commerce and Community Development

This report is in accordance with 24 V.S.A. Section 4384(c) which states:

"When considering an amendment to a plan, the planning commission shall prepare a written report on the proposal. The report shall address the extent to which the plan, as amended, is consistent with the goals established in Section 4302 of this title."

The Planning Commission has made revisions to:

- (1) the Economic Development section in order to comply with the new requirements effective July 1, 2014 established in 24 V.S.A. Section 4302(c)(2) relating to providing a strong and diverse economy and Downtown Designation; and
- (2) the Natural Resources section in order to comply with the new requirements effective July 1, 2014 established in 24 V.S.A. Section 4302(c)(14) relating to flood resilient communities.

Respectfully submitted,

*Anne Bransfield / smw*

Anne Bransfield, Chair  
Brandon Planning Commission

**Brandon Town Plan**

**DRAFT — ~~January 15~~ March 4, 200914**

**WITH COMMENTS RECEIVED AT SELECTBOARD HEARINGS  
~~APRIL 10~~ May XX, 20092014**

**Prepared by**

**Brandon Planning Commission**

**As per**

**Title 24, Chapter 117**

**Vermont Statutes Annotated**

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## INTRODUCTION

*“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.”<sup>1</sup>

## OVERVIEW

### Purpose

The Brandon Town Plan is a statement of how the Town's future development should proceed in order to promote the health, safety and welfare of its citizens. It is intended to guide decisions that affect future growth and development in the town. In general, the goals, policies and recommendations 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 long-range goals and vision it contains are designed to address the town's needs during the next 20 years. The Plan is readopted on a five-year basis as required by statute and in order to provide for incremental adjustments in planning.

### Use of the Plan

The Plan is intended to be the foundation for community programs, policy setting, and decision-making. The findings and recommendations should 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 should be given full effect in all appropriate regulatory proceedings such as Act 250.

Like any community, a wide range of interests and issues exists in Brandon. Unanimous agreement on any topic or detail is difficult to achieve in a diverse group of people. The Plan attempts to balance those interests and thereby best represent the variety of opinions in the community as well as garner the most support.

The Technical Appendices A-G attached to the Town Plan constitutes the best and most recent available data as of the date of adoption. It is expected that, almost immediately after the adoption of this Plan and continuing thereafter over the life of the Plan, the referenced data sources will make available updated statistical and technical information of relevance. As such data becomes available, it may be used to supplement the current data by those seeking to implement the terms and provisions of the Town Plan.

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<sup>1</sup> Brandon, Vermont: A History of the Town 1761-1961; published by the Town of Brandon, 1961.

**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 in conformance with the statutory requirements. It is also consistent with the Rutland Regional Plan, as readopted in 2008, and is compatible with the approved plans of surrounding communities of Sudbury, Chittenden, Pittsford, Hubbardton, Goshen, and Leicester. In multiple ways, Brandon serves as a hub to these other communities. For a more in-depth analysis of compatibility, see the Future Land Use section of this Plan. Under the authority of the Selectboard, the Brandon Planning Commission, in concert with other interested parties, prepared the Town Plan and submitted it for final approval by the Selectboard. 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 2002. This version was re-adopted on December 17, 2007 in anticipation of a full update in 2008. The update has been drafted by members of the Planning Commission with input from the public, the Brandon Selectboard and members of the Development Review Board. Technical assistance, made possible by a Municipal Planning Grant, has been provided by town staff and via a contract with the Rutland Regional Planning Commission. 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. Two widely advertised public forums were held in addition to displays and presentations by Planning Commissioners at Town Meeting and at the Town Library. A survey was conducted by the Planning Commission while updating the Plan to gauge the public's opinion on key issues. 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 to make theirs a better community. Dedication is evident in recent 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.

## **VISION**

Brandon is an intimate, warm and walkable small town with a strong sense of place and significant community and historic assets, including a compact and full-service downtown. Brandon's downtown is unusual in that it still provides the essential goods and services that have moved to the outskirts of many Vermont towns. Our town provides the local populace and residents of surrounding towns with opportunities for jobs, retail goods and services, and the social and civic benefits of an active and diverse community. This plan will guide future growth to promote the health and welfare of Brandon's residents and protect the things that make Brandon special: our natural resources, our historic streetscape and our community character. This vision is articulated in the goals, objectives and recommendations contained within each section of the Plan. The recommendations represent items of priority, but they are not meant to address all questions and actions related to the Plan and therefore should not be considered to be all-inclusive.

Below are the goals outlined within each section of the Plan.

### **Public Facilities and Services**

#### **GOAL:**

Maintain and/or expand public facilities and services infrastructure to satisfy the current demand and accommodate additional growth consistent with this Town Plan.

### **Energy**

#### **GOAL:**

Encourage energy efficiency and recycling, as well as renewable and alternate power sources and fuel sources within the Town of Brandon and in cooperation with other organizations.

### **Housing**

#### **GOAL:**

Promote compatible, safe and affordable housing, of a variety of types, for all residents of the community.

### **Child Care**

#### **GOAL:**

Encourage a variety of quality child care options.

### **Recreation**

#### **GOAL:**

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

### **Historic Resources**

#### **GOAL:**

Protect and maintain the town's historic settlement patterns, protect historic locations, safeguard archeological sites, and encourage the preservation of architectural assets, which are all non-renewable resources.

### **Cultural Resources**

#### **GOAL:**

Contribute to the quality of life in Brandon by promoting a variety of cultural resource opportunities.

**Economic Development**

## GOAL:

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

**Natural Resources**

## GOAL:

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

**Transportation**

## GOAL:

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

**Future Land Use**

## GOAL:

Encourage strategic growth and economic development while protecting existing cultural, historic and natural resources.

## **COMMUNITY PROFILE**

### **Physical Characteristics**

The Town of Brandon encompasses 25,152 acres, or 41 square miles in area, 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 influenced by events and conditions in both counties.

### **Brief History of Brandon**

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 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 historic Crown Point military road came through Brandon to connect Lake Champlain to the east coast. 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. Pearl and Park Streets were laid out to be suitable for militia training, resulting in broad, tree-shaded streets with deep front yards.

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**

Brandon has the "Town Meeting" form of government. In 1947, Brandon adopted the Selectboard/Town Manager form of government which delegated general supervision of the affairs of the Town to an employed Town Manager. The Selectboard remains the governing body of the Town. Three of the five Selectboard 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**

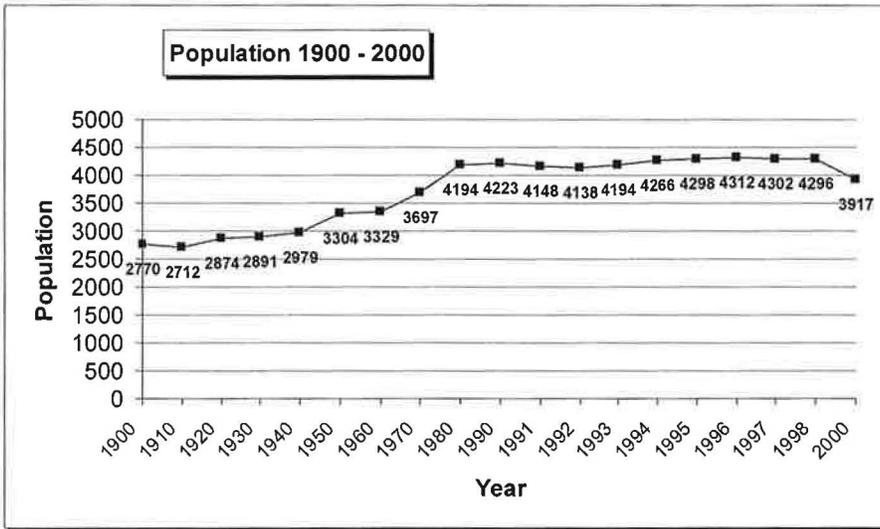
An analysis of a community's population, housing, and economic activity is an important feature of a municipal plan. This socioeconomic information allows the Town to estimate future population growth or decline, anticipate impacts on community services and land use, and

respond to the changing needs and demands of citizens. The following information is a highlight of recent trends in the Town of Brandon, with more detailed information in the Technical Appendices. Most of the data is based upon the 2000 Census.

**Population**

According to the 2000 Census, Brandon has the fourth highest population of the 27 communities in Rutland County. The chart below shows the population changes over the past century in the Town of Brandon. The population in 1850 was 2,194. The Town experienced a long period of population increases throughout the 20th century with a high in 1998. In the last decade, the trend reversed and the population decreased. Some of this loss could be attributed to the closing of the Brandon Training School.

Town of Brandon Population



**Age and Social Characteristics**

Generally, Brandon's population is becoming older. For example, median<sup>2</sup> age rose from 33.7 in 1990 to 39.3 in 2000, largely as a result of increases in the middle age segments 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. (For more detail: Technical Appendix A, Figure 6).

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.

<sup>2</sup> The median age is the "middle" age of a population. One half of the population is older than the median age, while the other half of the population is younger than the median age.

**Households**

The distribution of Brandon's population within the community is also becoming more dispersed. The average household in the community is becoming smaller as the average household size fell from 2.74 in 1990 to 2.35 in 2000 and the number of households formed is increasing. Between 1990 and 2000, the number of households in the town increased roughly 3.5% (see Figures 7, 8, 9 and 10 in Technical Appendix A).

Brandon has a higher percentage of families relative to total households than the county and the state, 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 27.2% in 2000, up from 26.3% in 1990. Single-female families dominate this category, representing over 80% of the single-parent families in Brandon.

**Income and Employment**

Median household and family incomes have risen over the period from 1989 to 1999. 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% of the total workforce was women. This number continues to increase. In 2000, 50.5% of the total workforce was women.

The 2000 general poverty rate in Brandon was 12.4%, which decreased from 17.9% in 1990. Also, the percentage of families in poverty decreased from 12.7% in 1990 to 6.8% in 2000. The level of education for persons over the age of 25 has greatly increased (see Technical Appendix D, figure 15). These poverty and education numbers indicate a significant shift in the overall economic well-being of the community.

The unemployment rate in 2000 was 5.2% of the labor force, which is below the average over the past decade (see Technical Appendix C, Figure 17). In 2000, Brandon residents were primarily employed in the manufacturing, retail trade and education sectors. Between 1990 and 2000 the industry sectors with the largest percent increase in employment were manufacturing, retail trade, and services (see Technical Appendix E, Figure 18). The figures do not reflect the changes which took place in 2008 as a result of national economic upheavals.

## **PUBLIC FACILITIES AND SERVICES**

### **Introduction**

The Town of Brandon encourages the development of an integrated and efficient infrastructure system to provide the services required by residential, commercial and industrial members of the community. This section contains information on water supply, sewerage, fire protection, police service, emergency management, education, health and human services, the library as well as public land and buildings.

### **Goal**

Maintain and/or expand public facilities and services infrastructure to satisfy the current demand and accommodate additional growth consistent with this Town Plan.

### **Objectives**

- Ensure that the rate of growth does not exceed the ability of the community, or the region, to provide the necessary level of facilities and services.
- 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.
- Results of GW mapping study (ES to provide)

### **Background**

#### **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. The Fire District #2 Prudential Committee serves as the operator of this facility.

#### **Brandon Water Supply System**

| <b>Sources</b>                   | <b>Estimated Capacity</b> |
|----------------------------------|---------------------------|
| <i>Primary Source: Well #2 -</i> | 630 gallons per minute    |
| <i>Secondary Source: Well #1</i> | 450 gallons per minute    |
| <i>Source Well #3</i>            | 800 gallons per minute    |
| <b>Storage</b>                   |                           |

|  |                 |
|--|-----------------|
| Glass-lined storage tank. Installed in 1989.   | 928,000 gallons |
| Earth-covered, concrete reservoir.   | 500,000 gallons |
| Water tower  | 750,000 gallons |
| <b>Distribution</b>  |                 |
| 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 800 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.

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.<sup>3</sup> 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. 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.

<sup>3</sup> Section 600.16 of the Brandon Land Use Ordinance Hazardous Materials.

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.<sup>4</sup>

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

### **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 132 calls in 2006 which totaled 1703 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.

The Police Station is located on the second floor of the Town Offices on Center Street. When detention facilities are required, those in Rutland City are available.

Communication and dispatching is currently handled through State Police dispatch in Rutland. Calls for local and State Police assistance are received and transmitted from this station by

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<sup>4</sup> See [http://www.town.brandon.vt.us/public\\_works.htm](http://www.town.brandon.vt.us/public_works.htm) for more information.

either radio or phone. At present, police coverage appears to be adequate, generally with prompt response to calls.

Population growth could affect long-term issues such as office space, currently a priority issue for the Police Department, as well as the requirement for additional officers.

**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 Country 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.

**Education**

Elementary education in Brandon is provided by the Neshobe School grades pre-K-6. A comparison of enrollment figures since 2003 is shown below. The Town of Goshen has an agreement to also send students to Neshobe School.

Neshobe School: General School Information

| School Participation Information       | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | State of Vermont<br>2006-2007 |
|--|-----------|-----------|-----------|-----------|-------------------------------|
| Total School Enrollment                | 395       | 374       | 378       | 369       | 95,481                        |
| Attendance Rate                        | 95.4%     | 95.3%     | 94.6%     | N/AV      | N/AV                          |
| Retention Rate                         | 0.0%      | 6.7%      | 8.3%      | N/AV      | N/AV                          |
| Estimated HS Cohort<br>Graduation Rate | N/A       | N/A       | N/A       | N/A       | N/AV                          |
| Student/Teacher Ratio                  | 16.00     | 15.81     | 16.18     | 15.15     | 11.12                         |
| Eligible Special Education             | 10.4%     | 10.2%     | 12.7%     | N/AV      | N/AV                          |
| 11-12 Technical Education<br>Rate      | N/A       | N/A       | N/A       | N/A       | N/AV                          |
| 9-12 Dropout Rate                      | N/A       | N/A       | N/A       | N/A       | N/AV                          |
| Home Study (Number)                    | 10        | 7         | 8         | 9         | 2,054                         |

Source: Vermont Department of Education School Report  
<http://crs.uvm.edu/schlrpt/cfusion/schlrpt07/gen.cfm?psid=PS200>

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.

Otter Valley UHS #8: General School Information

| School Participation Information       | 2003-2004 | 2004-2005 | 2005-2006 | 2006-2007 | State of Vermont<br>2006-2007 |
|--|-----------|-----------|-----------|-----------|-------------------------------|
| Total School Enrollment                | 737       | 744       | 720       | 718       | 95,481                        |
| Attendance Rate                        | 93.4%     | 93.4%     | 94.1%     | N/AV      | N/AV                          |
| Retention Rate                         | 1.2%      | 5.5%      | 4.0%      | N/AV      | N/AV                          |
| Estimated HS Cohort<br>Graduation Rate | 77.1%     | 84.68%    | 79.34%    | N/AV      | N/AV                          |
| Student/Teacher Ratio                  | 12.64     | 12.55     | 12.46     | 12.24     | 11.12                         |
| Eligible Special Education             | 11.8%     | 14.8%     | 15.4%     | N/AV      | N/AV                          |
| 11-12 Technical Education<br>Rate      | 10.9%     | 11.9%     | 15.9%     | N/AV      | N/AV                          |
| 9-12 Dropout Rate                      | 5.0%      | 2.36%     | 3.05%     | N/AV      | N/AV                          |
| Home Study (Number)                    | 11        | 14        | 14        | 14        | 2,054                         |

Source: Vermont Department of Education School Report  
<http://crs.uvm.edu/schlrpt/cfusion/schlrpt07/gen.cfm?psid=PS219>

The Rutland Northeast Supervisory Union projects that the school-aged populations served by both the Neshobe and Otter Valley schools will decline over the next decade. Therefore, capacity of existing schools to serve the need is deemed to be adequate at this time. 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.

**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 of the lower floor of the Parmenter Block, the building it now occupies. In 2001, the library celebrated its 100<sup>th</sup> 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 49,000 books. 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. About half of the library's budget is included in the Town's budget, which is voted each year at Town Meeting. 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 35 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 640 calls in 2006 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 from the Town's budget. The Brandon Senior Citizens have planned internal improvements to the Center and recently completed the expansion and paving of the parking lot.

#### **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.

#### **Municipal Services**

Brandon is governed by an elected Selectboard. 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 at meetings and during negotiations. The Manager also coordinates other functions of government which are not under his/her direct supervision such as tax assessment and records. Town government is located in inadequate quarters at the corner of Center and West Seminary Streets. The Selectboard is currently considering several options for relocating the town offices.

#### **Recommendations**

- The town shall provide strong protection measures for the aquifers which are the water source for the fire district wells. Any new development in the aquifers must be connected to the town sewer system and priority should be given to extending sewer lines to residences within the aquifer protection area which 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

- The Town should continue its appropriations to such quasi-public agencies as the Fire Districts, BARS, the library, and the Senior Center in order to meet local needs and to provide a broad base of cultural and recreational activities to attract industry, businesses and to support tourism.

## ENERGY

### Introduction

Energy costs and the environmental impacts of energy production both within and beyond our region have made energy an important issue and a planning priority. In addition, the Rutland Region is a net importer of energy; making awareness of energy sources, supply, and consumption patterns an essential component of thoughtful development.

### Goal

Encourage energy efficiency and recycling, as well as renewable and alternate power sources and fuel sources within the Town of Brandon and in cooperation with other organizations.

### Objectives

- Encourage the efficient use and conservation of energy resources.
- Maintain and/or expand energy infrastructure to satisfy the current demand and accommodate additional growth consistent with this Town Plan.
- Reduce direct and indirect transportation energy demands.
- Establish a town energy committee.

### Background

#### State Trends and Data

##### Energy Use

##### *Energy Consumption in the State of Vermont for 2005*

|                   | Trillion Btu | Percent of Total |
|-------------------|--------------|------------------|
| Total Consumption | 167.0        | 100%             |
| Residential       | 49.8         | 30%              |
| Commercial        | 32.4         | 19%              |
| Industrial        | 30.5         | 18%              |
| Transportation    | 54.2         | 32%              |
| Electric          | 67.1         | 40%              |

Source of Data: Energy Information Administration, State Energy Data

[http://www.eia.doe.gov/emeu/states/state.html?q\\_state\\_a=vt&q\\_state=VERMONT](http://www.eia.doe.gov/emeu/states/state.html?q_state_a=vt&q_state=VERMONT)

##### *Rising Fuel Costs*

The Vermont Department of Public Service provides a monthly fuel price report, demonstrating the changing costs of fuel.<sup>5</sup> While some price changes represented in the One-Year Price Trend are seasonal, the increasing cost of fuel is a significant trend. Fuel costs are an important concern for Brandon's residents.

<sup>5</sup> Vermont Department of Public Service Fuel Price Report for March 2008  
<http://publicservice.vermont.gov/pub/fuel-price-report/08march.pdf>. Accessed May 15, 2008.



Source: Vermont Department of Public Service Fuel Price Report, March 2008

### Energy Use in Brandon

The residents of Brandon use a variety of energy sources. According to the 2000 Census, the majority of the housing units use fuel oil as the major heating source. Propane, coal and wood are also available and are used by some families. Solar energy and wind power are not utilized to any significant extent but as the cost of home heating oil continues to increase, these sources of energy may become more common.

### House Heating Fuel: Brandon

| Source                   | Number | Percent |
|--------------------------|--------|---------|
| Utility gas              | 18     | 1.1     |
| Bottled, tank, or LP gas | 197    | 12.5    |
| Electricity              | 60     | 3.8     |
| Fuel oil, kerosene, etc. | 1151   | 73.2    |
| Coal or coke             | 6      | 0.4     |
| Wood                     | 127    | 8.1     |
| Solar energy             | 0      | 0.0     |
| Other fuel               | 7      | 0.4     |
| No fuel used             | 6      | 0.4     |

Source: U.S. Census 2000

### Transportation

Transportation is a significant source of energy use in the Rutland Region and Vermont as a whole, due to our rural nature. To a large extent, Brandon is a bedroom community exporting workers to larger employment centers such as Middlebury and Rutland. This results in high automobile use by commuters and the related consumption of fuel. Assuming Brandon's energy use can be approximated by state trends, Brandon's transportation needs make up about one third of total energy consumption (see state data above). Cutting costs for transportation will mean promoting the use of more efficient vehicles, reducing trips out of town, encouraging pedestrian-friendly development, and developing public transportation options. With the growth of public transportation being offered by the Marble Valley Regional Transit District (MVRTD or, "The Bus") in the Rutland region in conjunction with Addison County Transit from Middlebury, citizens are being given an opportunity to reduce energy consumption. As demonstrated by the results of the Community Survey administered by the Planning Commission in 2008, Brandon residents are strongly in favor of these measures: increasing pedestrian infrastructure, encouraging bike paths, and ride-share/park-n-ride programs.

*Brandon Residents Commuting to Work: workers 16 years and over*

|   | <b>Number</b> | <b>Percent</b> |
|---|---------------|----------------|
| Car, truck, or van – drove alone          | 1511          | 80.8           |
| Car, truck, or van – carpooled            | 215           | 11.5           |
| Public transportation (including taxicab) | 0             | 0              |
| Walked                                    | 90            | 4.8            |
| Other means                               | 8             | 0.4            |
| Worked at home                            | 47            | 2.5            |
| Mean travel time to work (minutes)        | 24.8          | (x)            |

Source: U.S. Census 2000

With rapidly changing fuel prices in 2007 and 2008, the number of carpooling residents increased. Also, public transportation to Rutland and Middlebury was enhanced and a Park-and-Ride lot was established in Brandon (see Transportation, Chapter 12).

*Electricity*

According to the *Rutland Regional Plan*, nearly 40% of the energy consumed in Vermont comes from electricity. In Brandon, Central Vermont Public Service (CVPS) services electric customers through its Middlebury district office. The right-of-way for the main transmission line of 46,000 volts runs north-south along US Route 7. Vermont Electric Power Company (VELCO) maintains a larger 115 kVolt line and a 345 kVolt line that runs through the western part of town. The lines provide power to the Burlington area through the Middlebury substation. There are two local distribution substations. One is near Otter Valley Union High School and serves the school and nearby homes while the second is located on Walnut Street and provides over 16,000 volts of electricity to the rest of Brandon, Forest Dale, Goshen and Leicester. Most recently VELCO completed the "North West Reliability Project" which is the 354 kVolt line that runs parallel to the older 115 kVolt transmission line.

CVPS's power is purchased mainly through long term contracts with Vermont Yankee Nuclear Power Station (48.0%) and Hydro-Quebec (39.3%).<sup>7</sup> While both of these energy sources are reliable and stable, there is some uncertainty about the long-term viability due to the approaching expiration of their contracts. The *Regional Plan* also predicts that energy use is likely to increase throughout the region at a slow pace, with high demand during the summer months.<sup>8</sup> A small amount of power is also purchased from wood (3.9%), oil (1.8%), CVPS Cow Power (0.1%), and other sources.<sup>9</sup>

*Alternative Energy Sources and Conservation Measures*

Brandon should support incentives to encourage the exploration of alternative energy sources such as wind, water, micro-hydro, geo-thermal, and solar power, provided they fit with the natural environment and surroundings. The *Rutland Regional Plan* also notes the potential for local energy production in the form of methane captured from dairy farms or landfills, re-establishment of hydroelectric dams, solar generation, wind power, and biomass/biodiesel.

<sup>6</sup>

<sup>7</sup> Central Vermont Public Service <http://www.cvps.com/ProgramsServices/EnergySources.shtml> Accessed May 15, 2008.

<sup>8</sup> *Rutland Regional Plan*, Adopted April 15, 2008.

<sup>9</sup> Vermont Department of Public Service Fuel Price Report for March 2008 <http://publicservice.vermont.gov/pub/fuel-price-report/08march.pdf>. Accessed May 15, 2008.

Other conservation measures recommended by the *Regional Plan* include the installation of energy-saving compact fluorescent light bulbs and green building practices. In addition to proper insulation and weatherization, building design can help reduce energy costs through south-facing windows to save on heating and off-peak thermal energy storage to save on cooling costs.<sup>10</sup>

#### *Development Patterns*

Careful planning of new development can also guide Brandon to greater energy efficiency. This Plan's Future Land Use planning goal is, "To encourage strategic growth and economic development while protecting existing cultural, historic and natural resources." The historic pattern of concentrated services and residential areas not only protects Brandon's rural history, but also makes alternative transportation methods like public transit, walking and biking more viable. This energy efficient land use model should be pursued in combination with green and energy efficient construction methods, alternative energy sources, and conservation measures.

#### **Recommendations**

- Encourage weatherization and rehabilitation programs to retrofit existing units through NeighborWorks of Western Vermont and other organizations.
- Adopt energy standards as part of the Brandon Land Use Ordinance for new construction and remodeling projects.
- Future replacements of street lights should use the latest technologies and be designed according to the guidelines in the *Outdoor Lighting Manual for Vermont Municipalities*.
- Encourage the use of alternative sources of energy and encourage energy efficiency through tax abatements and programs such as Efficiency Vermont.
- Promote commuter car pooling by promoting, maintaining, and expanding Park-and-Ride areas.
- Support continuation and expansion of public transit service along the US Route 7 corridor serving Brandon residents.
- Support opportunities for walking, cycling and other energy efficient, non-motorized alternatives to the automobile.
- Encourage settlement patterns which reduce travel requirements for work, services, shopping and recreation.
- Make public buildings models of energy efficiency.
- Establish and empower a Town Energy Committee to create a town energy plan in order to develop and implement local energy conservation and generation initiatives.
- Require incentives to encourage new construction and retrofits to existing structures to meet energy efficiency standards.

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<sup>10</sup> *Rutland Regional Plan*, Adopted April 15, 2008.

## **HOUSING**

### **Introduction**

Housing, especially housing affordable for the average Vermonter, is an increasingly important issue for communities in Rutland County and the State of Vermont. Nationwide, a trend toward fewer persons per household has changed the type of housing needs and increased the demand for housing in many towns, even with stable or declining populations.

Brandon has housing needs unique to the town's location which is halfway between Middlebury and Rutland. There is a wide variety of housing available in Brandon. Most of the housing was built prior to 1940, and many single family homes which, along with large houses which were earlier converted to apartments, need rehabilitation. Few (if any) of these units are energy efficient, and most have suffered functional depreciation due to lack of maintenance. Housing built since 1940 is in better condition, although still not at optimal levels of energy efficiency.

Brandon has, for its size and population, a significant proportion of senior and family "permanently affordable" housing units in multi-family buildings. Most of them were developed by renovating existing institutional or commercial buildings, and thought was not given to total life-cycle costs, including energy efficiency. Due to Vermont Statutes, they are granted special tax considerations, which affects municipal revenues.

Since 1990 land values have appreciated significantly in Brandon. That fact, combined with the cost of permitting and improving building lots (water, wastewater, etc.) has led builders and developers to target households with higher incomes for new construction. Along with being a bedroom community for Rutland and Middlebury, Brandon has always been attractive to people purchasing second or retirement homes. There has been little, if any, construction of housing that would be affordable for single parent households or dual income working families.

### **Goals**

Promote compatible, safe and affordable housing, of a variety of types, for all residents of the community.

### **Objectives:**

- Protect the integrity of the community, existing neighborhoods and town center by encouraging the preservation and renovation of existing housing stock before allowing new development.
- Discourage sprawl by encouraging development in existing residential zones.
- 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.

## **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 into a mix of industrial, commercial, agricultural and recreational uses. New development typically occurs toward the perimeter of the village area and is concentrated along the US Route 7 corridor. 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 detached housing, there is a wide variety of housing options in town, including multiple-dwelling structures of up to five units, senior housing, condominiums, and mobile homes. Brandon has a wider variety of housing options than its neighboring communities. In 2000, 66% of occupied housing was single-family detached units, 11% mobile homes, and 14% were structures containing two or more units.

In 2000, 70% of housing units were owner-occupied and 22% were renter occupied. The remaining housing units were owner un-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 a negligible 2.7% of the housing in Brandon according to the 2000 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 2000 Census, there were 1,752 households in Brandon and a total population of 3,917 persons. Families made up 70% of the households in 2000, and the average household had 2.5 members. Of the families with children under the age of 18, a large portion, 73%, are traditional, married-couple families. The "over 65" age group accounted for 13.7% of Brandon's residents

### *Housing Market*

The issuance of building permits for new construction is one indicator of trends in an area's housing market. In 2006, 100% of the new home permits were for constructed and manufactured housing and none were for new mobile homes. There were four permits issued for replacement mobile homes and five permits were approved for apartment conversions issued over the same period. {put in 2008 data from Tina}

Brandon has an expanded, moderately priced housing market. The price of housing has increased significantly over the past several years. In 2005 there were 54 homes sold with an average selling price of \$175,617.00. In 2006 there were a total of 19 homes sold with an average selling price of \$214,508. This constitutes a significant increase in average price, enough so to mandate a town wide re-appraisal, which was completed in 2008. Due to the relatively small number of properties that are sold in a given period of time, the results can be

substantially affected by only a few transactions. This is particularly relevant since Brandon now has more than a few quite expensive properties relative to the overall market.

*Affordable Housing*

Kellie said Ethan will revise A 1999 report by the National Low Income Housing Coalition found Vermont to be the fourth least affordable state for renters in the nation. Homeownership in Vermont is also difficult for many creditworthy households due to the high upfront costs of purchasing a home and the increase in median home sales prices in recent years. Brandon has a considerable number of 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 Land Use 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. Below is the estimated hourly wage needed to afford the related housing size.

|                    |  |         |
|--------------------|--|---------|
| Housing wage, 2008 | <i>(source: Vermont Housing Data <a href="http://www.housingdata.org">www.housingdata.org</a>)</i> |         |
| Number of Bedrooms | Brandon  | Vermont |
| 0                  | \$ 9.12  | \$11.43 |
| 1                  | \$11.92  | \$13.12 |
| 2                  | \$13.87  | \$16.07 |
| 3                  | \$18.33  | \$20.91 |
| 4                  | \$23.46  | \$24.07 |

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.

**Recommendations**

- Encourage the preservation and renovation of existing housing over new development.

- Enable property owners to apply for tax credits and other incentives for the rehabilitation of old or substandard housing units.
- Use the Brandon Land Use Ordinance to encourage new growth in existing residential areas, including the downtown area.
- Require pedestrian friendly development (sidewalks and bike paths) with any new significant residential 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 Brandon Land Use Ordinance which allow 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.

## **CHILD CARE**

### **Introduction**

The availability of high quality child care for our residents is a big factor related to the affordability of living in Brandon. As more households have more than one income per family, parents of young children desire safe, accessible, and affordable child care 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 is available on-line from the Vermont Department of Children and Families.

### **Goal**

Encourage a variety of quality child care opportunities

### **Objectives**

- Encourage flexibility regarding location and facility type.
- Provide quality environments at affordable prices for children in child care.

### **Background / Analysis**

Children under 15 years of age in Brandon comprised about 20% of the population according to the 2000 Census figures. Of those children, 208 were under the age of five, and 265 were five to nine years old. Families with children under the age of 18 formed 32% percent of Brandon households. While 7% of Brandon's families are listed with poverty status, nearly all of those families have children under the age of 18 (74 of 80 families in poverty). Furthermore, female-headed families living in poverty number 55, all with children under the age of 18.

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 already struggling 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.

### **Recommendations**

- Continue to permit the use of single family homes in Brandon for small-scale family child care facilities as home occupations.
- Ask parents and / or child care providers in Brandon to provide input on the need for additional child care facilities.

## **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. The Neshobe Sportsman's Club organizes events and activities for all ages. 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.

### **Objectives:**

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

### **Recreation 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, 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. Examples of private offerings include the Bill Koch Ski Club, the Neshobe Sportsman Club, the Rutland Area Physical Activities Coalition, the VAST Trail network, and the MLA Youth Soccer League.

### **Brandon's Recreation Program**

Brandon supports a Recreation Department which 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 supports 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 Neshobe Sportsman's Club maintains a trail system for snowmobiling in Brandon and Forest Dale, much of which is on private land with owner permission. Other trails are also maintained by the Vermont Association of Snowmobile Travelers (VAST).

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.

### **Recommendations**

- Complete the *Recreation Master Plan* for the Town of Brandon.
- Support the Brandon Recreation Advisory Committee in their efforts to plan for and promote recreational opportunities.
- 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.
- Support the efforts to establish a Boys and Girls Club in Brandon.

- 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, biking, 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 RESOURCES

### Introduction

Brandon has a wide variety of historic resources which enhance the character of the community, provide opportunities for residents, and contribute to the economic vitality of the town. A detailed exploration of the Town's historic resources can be found in the Brandon Workbook (2002), a companion volume to this Plan. The Workbook identifies Brandon's historic resources, especially in the town center, as unique among Vermont towns because Brandon has not been harshly impacted by modern pressures such as strip development and big chain stores. This has allowed the town center to retain much of the character and charm of a turn-of-the-century village. Brandon possesses "an architectural legacy, a cultural history, and a unique visual identity" that contributes to the creation of community, historic pride, and economic advantage. These assets must be carefully managed.<sup>11</sup>

### Goal

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.

### Objectives

- 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.

### 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. Many aspects of modern life in Brandon are touched by the past.

Several organizations in Brandon are dedicated to the preservation of the town's historic resources as well as public education. They include the Brandon Historical Society, the Friends of the Brandon Town Hall, the Stephen A Douglas Birthplace Community Center, Inc., 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.

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<sup>11</sup> Summarized from Brandon Workbook (updated by Brandon historic Preservation Commission, 2002).

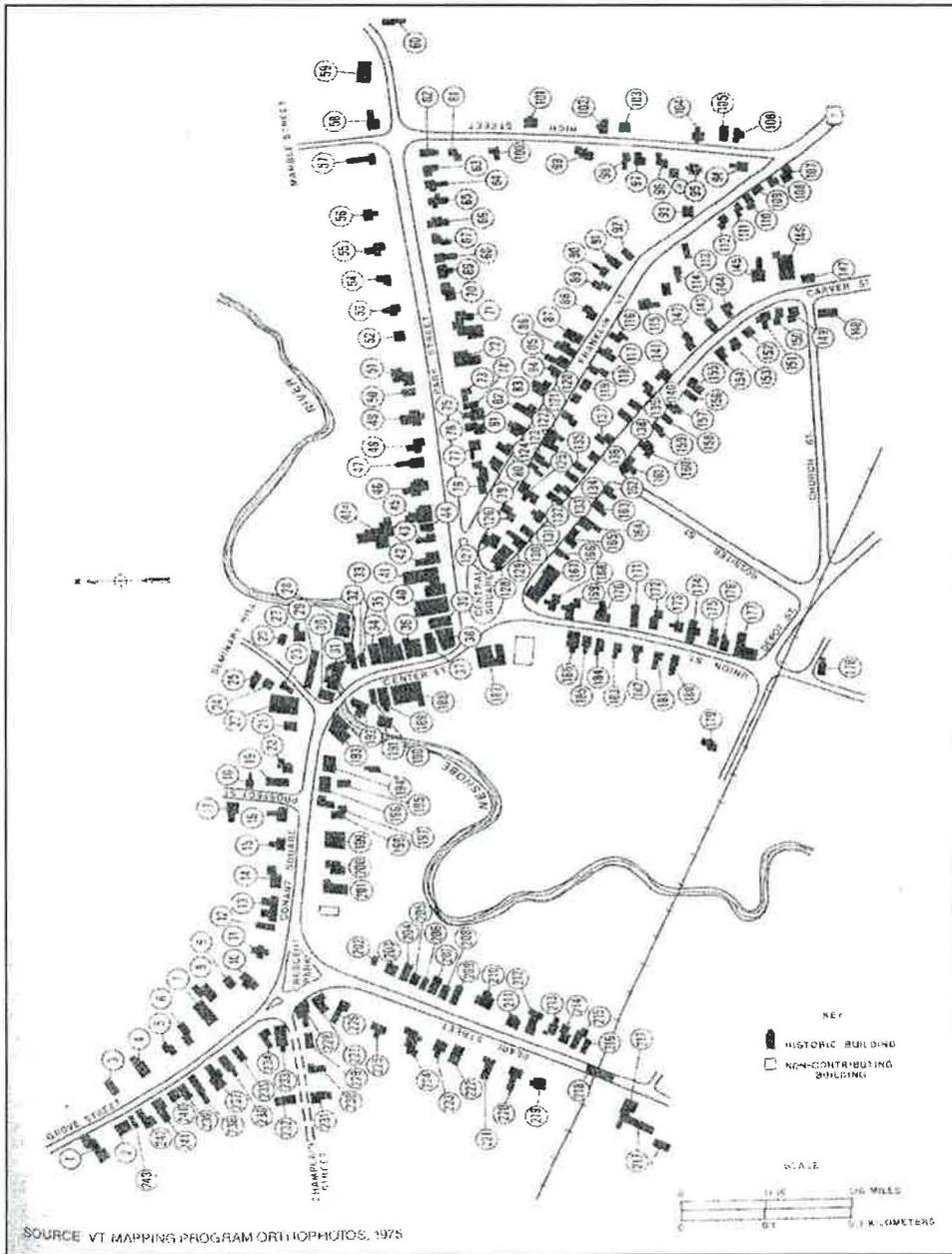


Figure 1. Brandon Village Historic District map (source: Vermont office of Historic Preservation).

The State of Vermont also has a Register of Historic Places and lists three historic districts: Brandon Village, Rossiter Street and Church Street.<sup>12</sup>

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.

### **Recommendations**

- Utilize Brandon's Certified Local Government (CLG) and Downtown Designation status by participating in programs for downtown improvements.
- Use federal guidelines to document historic structures, and consider alternatives, prior to their removal or demolition.
- Support the Historic Preservation Commission in an effort to train in the management of historic information and documentation of historic resources.
- Develop and maintain a complete inventory of historic resources.
- Encourage the use of the Brandon Workbook as a 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.
- Encourage a rewrite and update of the History of Brandon, a book written and published by the Town of Brandon in 1961.
- Maintain a library of resources in the town office for historic preservation and restoration.
- 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.

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<sup>12</sup> 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.

## **CULTURAL RESOURCES**

### **Introduction**

Brandon 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.

### **Goal**

Contribute to the quality of life in Brandon by promoting a variety of cultural resources and opportunities.

### **Objectives**

- 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.

### **Background**

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.

### **Recommendations**

- 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.

## **ECONOMIC DEVELOPMENT**

### **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 and Cultural attributes, as previously discussed. These add substantially to the quality of life and can influence businesses and individuals considering locating or investing in Brandon. Care should be taken to protect and enhance these resources and they should be 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.

### **Objectives:**

- 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.
- Facilitate public improvement projects which will promote economic development.
- Encourage the growth of home occupations and the "informal economy" including local artisans, craftspeople, and seasonal businesses.
- Pursue jobs and businesses which are compatible with a rural community such as those that are less transportation-dependent and more environmentally friendly.
- Emphasize Brandon's Recreational, Historical and Cultural attributes as an integral part of the community's development strategy.

## Background

### Economic Characteristics<sup>13</sup>

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.<sup>14</sup> 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. Figure 21 in the Technical Appendices lists the most recent county data, but since it is from 2005, it does not reflect national economic upheavals which took place in 2008. 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

Brandon, with 3,917 residents, is the fourth largest town in Rutland County and has 6.2% of the county's population. The annual average unemployment rate is 12.4% of the population and 6.8% of families in 2000. According to the 2000 Census, a majority of the employed residents of Brandon work in manufacturing (40%), government (23%) and retail trade (14%). Construction, professional and related services, entertainment services, and health services accounted for most of the other employment sectors where Brandon residents were employed.<sup>15</sup> Brandon residents earn wages slightly below the state median.<sup>16</sup> 64% of the Brandon workforce

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<sup>13</sup> See Figure 20 in the Technical Appendix for the "Demographic-Economic Comparison Chart of Rutland County Towns" for economic indicators for area communities and Brandon's relative relationship within the region.

<sup>14</sup> 1997 Vermont Downtown Economic Impact Study, Douglas Kennedy and Associates. See Figure 20 in the Technical Appendix.

<sup>15</sup> Technical Appendix, Section E. Employment, Figure 18.

<sup>16</sup> According to the 2000 Census, Vermont's 1999 median household income was \$40,856 while Brandon CDP median household income was \$34,609.

commutes out of town to work.<sup>17</sup> It should be noted that these figures do not reflect changes of 2008.

### **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. The Brandon Downtown Development Corporation helps to oversee this program.

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.

### **Recommendations**

- 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.

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<sup>17</sup> 2000 Census Data indicates that 846 or about 64% of Brandon's 1330 employed persons commute to work.

- 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.
- Explore the creation of more parking options in Brandon's central business district.
- 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 implementation of the Brandon US Route 7 Upgrade.
- Support "Backyard" improvement plans.
- Investigate applying for Designated Village Center status for Forest Dale.
- Protect and enhance Brandon's Recreational, Historical and Cultural attributes.
- Include Brandon's Recreational, Historical and Cultural attributes as a strong element in a fully integrated plan for future economic development.

## NATURAL 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. The dependence 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 and promote conservation of our natural resources

### Objectives:

- Identify, protect, and preserve the natural areas.
- 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%. 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 also flows through this channel. 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% 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 distribution of 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.

In the future, it is recommended that those companies or contractors engaging in transportation and extraction of resources pay their fair share of costs associated with the activity.

## **Water Resources and Flood Resilience**

### *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 largest 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 these surface waters Neshobe River Corridor.](#) [\\Server-2003\sys\WP51\USERS\Tina\neshobe river corridor\Neshobe River CorridorPlan final 09 12 11 with appendices.pdf \[BE SURE TO LINK PLAN HERE\]](#) [\\Server-2003\sys\WP51\USERS\Tina\neshobe river corridor\Brandon FEH Map.pdf \[LINK MAP HERE\]](#) [\\Server-2003\sys\WP51\USERS\Tina\zoning\2006 bluo\2012 bluo amendments\may 29 2006 bluo with final may 7 2012 revisions.pdf \[LINK FOR BLUO\]](#)

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 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. [Brandon has adopted a Fluvial Erosion Hazard Area bylaw and map, which regulates development adjacent to these surface waters.](#) 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.

### *Dams and Impoundments*

There are several small dams and impoundments in Brandon, many of which no longer serve their original purpose; most of these dams are maintained under private ownership. The Neshobe River Dam in the Village is publicly owned but no longer serves a commercial use. The dam on Jones Brook creates Jones Mill Pond which now serves as an irrigation supply for Woods Farm. The Blair Dam on Arnold Brook and another dam on Adams Brook served as private water supply facilities.

#### *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. Flood Hazard Areas are identified on Natural Resources Map 1 of 2. The town has also adopted an All-Hazards 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 Zoning Administrator is also a Certified Floodplain Manager. \\Server-2003\sys\WP51\USERS\Tina\brandon hazard mitigation plan. [be sure to link to Brandon's hazard mitigation plan.] The town has adopted comprehensive floodplain management and fluvial erosion hazard policies.

**Comment [LK1]:** Look at floods/fluvial erosion section of hazard mitigation plan to make sure the plan actually does this.

**Comment [LK2]:** Add info on when Brandon joined the NFIP, and any other NFIP info available (such as # of houses in floodplain, # of properties with flood insurance, etc.).

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. ~~The adoption of floodplain management policies, including fluvial erosion hazard area restrictions, is strongly encouraged by the State and the Federal Emergency Management Agency.~~

#### *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.

#### *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: 1) regulation of on-site sewage systems, 2) surface water setback requirements, 3) floodplain regulations, 4) vegetated buffer requirements, 5) erosion control measures on steep slopes, and 6) 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.

#### **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, by restricting development in and around corridors. 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% of the total land area, in the Use Value Assessment Program<sup>18</sup> 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.

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.

The southern 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.

The Brandon Town Forest is located along Brandon's eastern border with Goshen and Chittenden, and contains about 80 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.

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<sup>18</sup> 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.

### **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 and commercial / industrial uses should be strongly discouraged.

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.

### **Recommendations**

#### *Physiography*

- Development should be prohibited in areas where the slopes exceed 20% and should be avoided in areas where the slopes are greater than 15%.
- 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.
- Development in the floodplain shall be strongly discouraged.
- Comprehensive floodplain management policies and fluvial erosion hazard identification shall be incorporated into land use regulations and will be considered when making permitting decisions
- Reduce future hazards from occurring by adopting a Fluvial Erosion Hazard Zone overlay district.
- 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).
- Development within the 100-year floodplain should be discouraged as much as possible.
- 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 fluvial erosion hazard areas identified on the Natural Resource and Fluvial Erosion Hazard Area Maps shall not exacerbate flooding and fluvial erosion, and should be avoided whenever possible.
- Protect and restore river corridors, floodplains, wetlands, and upland forested areas that attenuate and moderate flooding and fluvial erosion.
- Maintain, update and implement the Local Emergency Operations Plan that encourages flood emergency preparedness, including Incident Command System trainings, and identify a process for response planning through...
- Continue to participate/comply with in the National Flood Insurance Program and work/attempt to restore/achieve Community Rating System- classification/Status.
- Maintain, update and implement policies and recommendations in the Town of Brandon All-Hazards Mitigation Plan specific to flooding and fluvial erosion, in order to mitigate risks to public safety, critical infrastructure, historic structures, and municipal investments.
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**Comment [LK3]:** This sounds more like a goal/objective- what specific policies and strategies are recommended to protect and restore these areas?

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#### *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.

- Continue the implementation of the 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 encourage burying of lines in public rights-of-way.
- 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.

## **TRANSPORTATION**

### **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.

### **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.

### **Objectives**

- 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 on existing transportation infrastructure.

### **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 20<sup>th</sup> century society became heavily dependent on automobile and truck transportation. 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. (See Technical Appendix G). 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 (See Technical Appendix G). 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 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 need to be improved. 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 will 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 strongly supports this project.

### **Trucks**

Recognizing that goods moved and services provided by trucks are important contributions to the public's welfare, Brandon suffers adversely from the noise, dust, vibration and congestion created by truck traffic. The Middlebury Rail Spur would increase the carriage of freight by rail. The Town supports construction of the spur and the realignment of US Route 7.

### **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, parking is a recognized problem that must be addressed. The angled parking spaces that currently exist, together with the narrowness of the road and the volume of traffic, create dangerous levels of conflicting movements. Provisions should be made for additional off-street parking. These provisions will need to acknowledge the importance of the town's aesthetics, historic character, economic development, and issues relating to the public's health and safety. Municipal parking added behind the Center Street stores in recent years has increased the number of available spaces.

### **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.

### **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. (See Technical Appendix G for more details)

In Brandon, the need for access management is most clearly visible along US Route 7 as it carries the heaviest volumes 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.

### **Non-Vehicular Transportation Modes**

Although highways 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*

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 has been 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. The Town of Brandon strongly supports the construction of The Middlebury Spur as well as development of a passenger station and a rail freight/truck transfer facility.

### **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.

#### **Recommendations**

- Support the Middlebury Rail Spur which allows for increased use of rail for freight transportation. Appoint a representative to the committee for the rail spur.
- Explore options to increase the number of parking spaces in the central business district.
- Encourage use of Brandon's municipal Park-and-Ride lot. Explore new P&R sites and expand existing sites.
- Require bike paths or lanes in all significant new construction
- Require sidewalks in all significant new construction.
- Prioritize maintenance of roads and bridges throughout Brandon.
- Maintain current inventory of infrastructure.
- Designate and maintain safe crosswalks of US Route 7 at all appropriate locations.
- Enforce speed and weight limits on all roads
- Coordinate planning and development with regard to the link between land use and transportation.
- Support the upgrade of US Route 7.
- 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.
- Support regional efforts to provide public transportation to all, for example, with bus routes.
- Implement shuttle service between Park Village and downtown Brandon.

## **FUTURE LAND USE**

### **Introduction**

The Town of Brandon must balance preservation of its community and character 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 cultural, historic and natural resources.

### **Objectives**

- Create 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 existing historic streetscapes.
- Recognize the town's cultural resources and historic settlement pattern as a significant, non-renewable resource that creates a sense of place and community well being.
- Cultivate greater mixed-use in the Central Business District.
- Identify, protect, and preserve the valuable natural areas within Brandon. Support and ensure the long-term protection of natural resources.
- Recognize the link between land use and transportation and coordinate their planning and development.

### **Existing Development**

The Town of Brandon contains a distinct, historic downtown or 'village' area which straddles the Neshobe River. There are four greens / parks, 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, a few 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.

For the past decade, the rate of growth, as reflected in number and types of zoning permits requested, has been somewhat consistent. Approximately 50% of those requests have been related to existing residential development (additions, accessory structures, sheds, pools and

mobile home replacements). Approximately 8% have been for new homes. Permits requested for new businesses or changes in businesses have averaged about 5% of the totals, while those for additions and/or signs for businesses averaged an additional 10%. Generally, growth has been strongest in the residential market (approximately 55-60%) while business permits accounted for approximately 15% of growth.

The following summary shows the level of zoning activity from July 2004 through June 2008.<sup>19</sup> While it does not reflect the nature of the permits, it does show a decrease in total applications received over the time period.

Statistical Summary of Zoning Activity

|                        | July 04 – June 05 | July 05 – June 06 | July 07 – June 08 |
|------------------------|-------------------|-------------------|-------------------|
| Applications Approved  | 107               | 114               | 100               |
| Applications Denied    | 5                 | 7                 | 4                 |
| Applications Withdrawn | 11                | 7                 | 2                 |
| Applications Pending   | 0                 | 0                 | 1                 |
| Total for Fiscal Year  | 123               | 128               | 107               |

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,

<sup>19</sup> Growth Center Planning Manual for Vermont Communities, VT DHCA Planning Division, March 2007, p.7

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 Grand Union 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.

#### **Future Development**

To be consistent with the goals outlined in this Plan, future growth should 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. Growth centers are a means for building on such existing patterns of development. Potential sites for growth center consideration include Park Village, Forest Dale and the area around the rail on Union Street. As defined by the Vermont Division of Housing and Community Affairs, "A growth center is a compact area planned for concentrated, mixed-use development.... The growth center will likely include lands outside the core. ... There will almost certainly be residential neighborhoods, there may be commercial or industrial areas.... The goals of growth center planning will include integrating existing and future uses within the growth center and increasing connections between currently disconnected areas."<sup>20</sup>

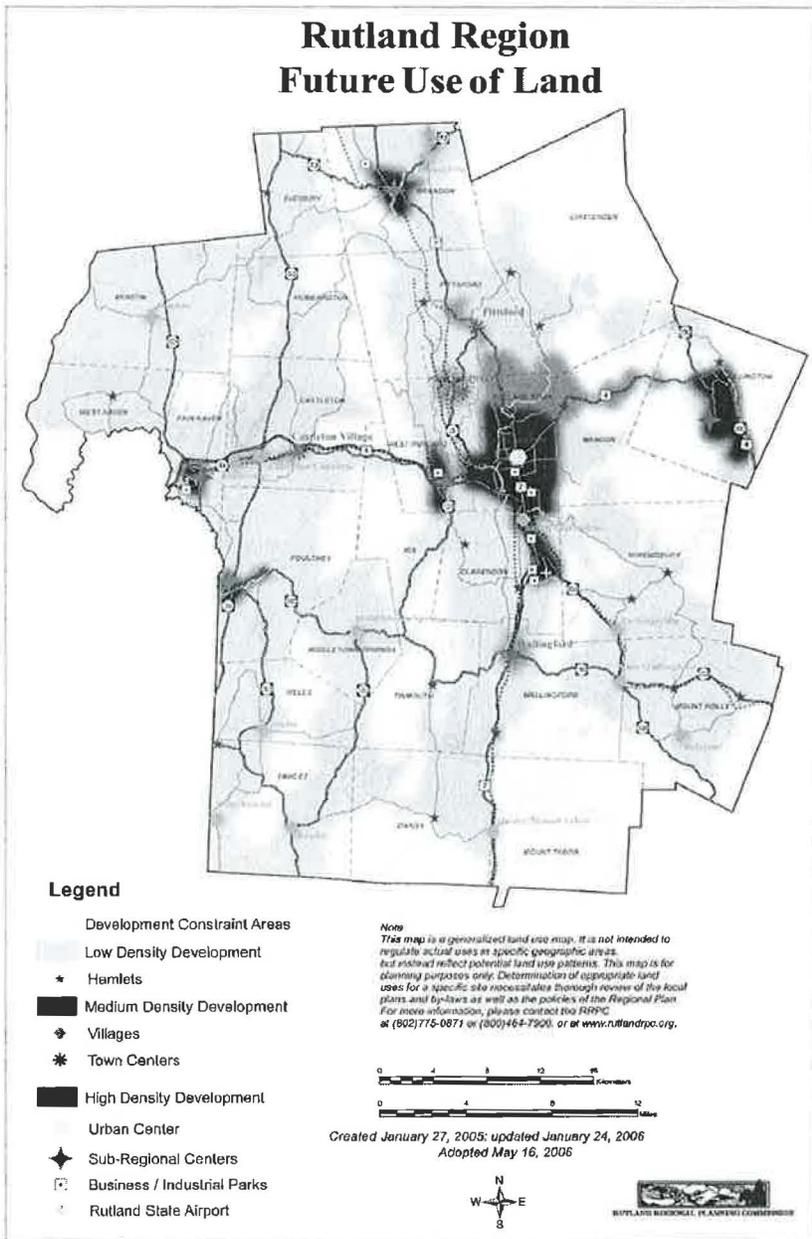
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Land that contains natural constraints on development (steep slopes, floodplain, aquifers, etc.) should be developed only when adverse impacts can be adequately prevented or mitigated. In developed areas, the appropriate reuse of existing buildings 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 should be of a similar scale and complementary design in order to be compatible with existing uses and development. The Future Land Use Map should be a blueprint of future growth in Brandon (see Figure 2).

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<sup>20</sup> Brandon Town Report FY06-07

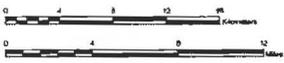
## Rutland Region Future Use of Land



**Legend**

- Development Constraint Areas
- Low Density Development
- ★ Hemlets
- Medium Density Development
- ◆ Villages
- ✱ Town Centers
- High Density Development
- Urban Center
- ◆ Sub-Regional Centers
- ⊠ Business / Industrial Parks
- Rutland State Airport

*Note*  
 This map is a generalized land use map. It is not intended to regulate actual uses in specific geographic areas, but instead reflect potential land use patterns. This map is for planning purposes only. Determination of appropriate land uses for a specific site necessitates thorough review of the local plans and bylaws as well as the policies of the Regional Plan. For more information, please contact the RRPC at (802)775-0871 or (800)464-7900, or at [www.rutlandrpc.org](http://www.rutlandrpc.org).



Created January 27, 2005; updated January 24, 2006  
 Adopted May 16, 2006



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

### **Consistency with Adjacent Town Plans**

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, does not have a 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.

### **Recommendations**

- Explore State Growth Center designation for the Park Village area as well as the area around the Union Street rail.
- Redefine permissible land uses in the McConnell Road area in order to prevent encroaching sprawl.
- Require future development in the McConnell Road area 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 another grocery store in Brandon, possibly as part of a growth center plan.
- Examine the potential for light commercial development in Park Village.
- Encourage greater infill development along the Park Village utility corridors.
- Consider incentives to promote reuse of existing buildings, especially in the Central Business District and McConnell Road areas, 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.

## **CONCLUSION AND IMPLEMENTATION**

A number of themes emerge when considering the various recommendations made in this Plan. In several instances, recommendations 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 recommendations made throughout the Plan, are a template for the future.

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

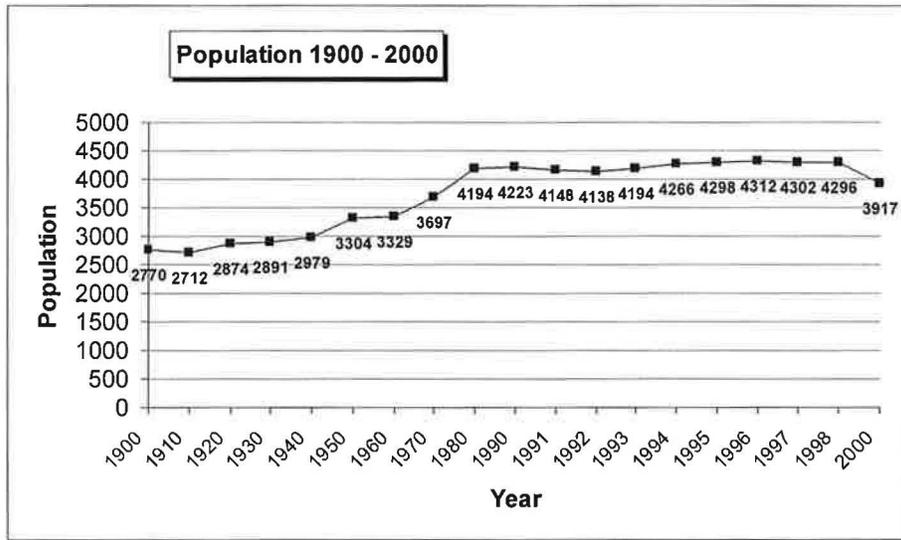
A well-defined work plan will operationalize the recommendations of this Town Plan. Public participation will ensure success.

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## A. POPULATION

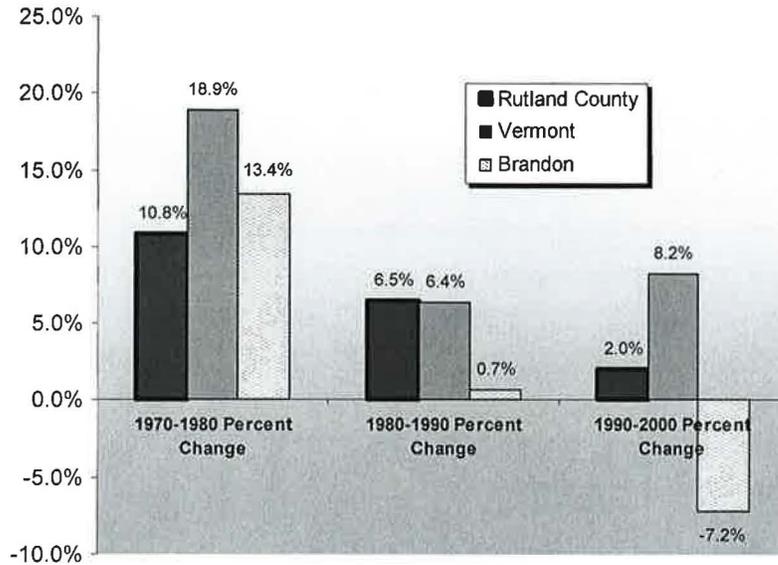
**Figure 1: Town of Brandon  
Population 1900 – 2000**



**Figure 2: Population 1791 – 2000  
Brandon, Rutland County and Vermont**

| Year | Brandon | % Change | Rutland County | % Change | Vermont | %Change |
|------|---------|----------|----------------|----------|---------|---------|
| 1791 | 637     |          | 14,773         |          | 85,088  |         |
| 1800 | 1,076   | 68.92%   | 22,319         | 51.08%   | 153,836 | 80.80%  |
| 1850 | 2,194   | 103.90%  | 33,059         | 48.12%   | 313,728 | 103.94% |
| 1900 | 2,770   | 26.25%   | 44,209         | 33.73%   | 343,641 | 9.53%   |
| 1910 | 2,712   | -2.09%   | 48,139         | 8.89%    | 355,956 | 3.58%   |
| 1920 | 2,874   | 5.97%    | 46,213         | -4.00%   | 352,428 | -0.99%  |
| 1930 | 2,891   | 0.59%    | 48,453         | 4.85%    | 359,611 | 2.04%   |
| 1940 | 2,979   | 3.04%    | 45,638         | -5.81%   | 359,231 | -0.11%  |
| 1950 | 3,304   | 10.91%   | 45,905         | 0.59%    | 377,747 | 5.15%   |
| 1960 | 3,329   | 0.76%    | 46,719         | 1.77%    | 389,881 | 3.21%   |
| 1970 | 3,697   | 11.05%   | 52,637         | 12.67%   | 444,732 | 14.07%  |
| 1980 | 4,194   | 13.44%   | 58,347         | 10.85%   | 528,850 | 18.91%  |
| 1990 | 4,223   | 0.69%    | 62,142         | 6.50%    | 562,758 | 6.41%   |
| 2000 | 3,917   | -7.24%   | 63,400         | 2.02%    | 608,827 | 8.19%   |

**Figure 3: Change in Population from Previous Estimate:  
Brandon, Rutland County and Vermont 1970-2000**



**Change from Previous Estimate**

- The state population is predicted to grow by about 2% going into 2020, while Rutland County's growth is more moderate. The County's growth is predicted to average about 6.8% through 2020.<sup>1</sup>
- Rutland County's percentage of the state population is predicted to decrease from is 10.4% share in the 2000 Census data to a projected share of 9.8% of the 2020 state population.<sup>1</sup>

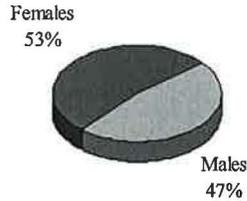
**Figure 4: Brandon's Population as Percentage of Total County Population & Rutland County's Percentage of Total State Population**

| Year                           | 1970   | 1980   | 1990   | 1998   | 2000   |
|--------------------------------|--------|--------|--------|--------|--------|
| Brandon as % of Rutland County | 7.02%  | 7.19%  | 6.80%  | 6.87%  | 6.18%  |
| Rutland County % of State      | 11.84% | 11.03% | 11.04% | 10.59% | 10.41% |

Source: US Census Bureau

<sup>1</sup> Department of Disabilities, Aging & Independent Living. General Reports. <<http://dail.vermont.gov/dail-publications/publications-general-reports/vt-population-projections-2000-2020-methodology-report-tables>>

**Figure 5: Brandon's Population by Sex, 2000**



- The percentage of males decreased from 49% in 1990 to 47% in 2000, while the female population increased from 51% to 53%.

**Figure 6: Age distribution of Brandon, Rutland County and Vermont – 1980, 1990 and 2000**

| Age           | 1990         |               | Brandon       |               | Rutland County |               | Vermont |            |
|---------------|--------------|---------------|---------------|---------------|----------------|---------------|---------|------------|
|               | 1990         | % of Total    | 1990          | % of Total    | 1990           | % of Total    | 1990    | % of Total |
| Age 0 to 5    | 365          | 8.6%          | 5,174         | 8.3%          | 49,644         | 8.8%          |         |            |
| Age 6 to 17   | 719          | 16.9%         | 9,818         | 15.8%         | 93,936         | 16.7%         |         |            |
| Age 18 to 24  | 366          | 8.6%          | 6,625         | 10.7%         | 61,933         | 11.0%         |         |            |
| Age 25 to 34  | 742          | 17.5%         | 10,166        | 16.4%         | 95,880         | 17.0%         |         |            |
| Age 35 to 44  | 666          | 15.7%         | 9,928         | 16.0%         | 92,804         | 16.5%         |         |            |
| Age 45 to 54  | 410          | 9.7%          | 6,462         | 10.4%         | 57,274         | 10.2%         |         |            |
| Age 55 to 64  | 366          | 8.6%          | 5,419         | 8.7%          | 45,118         | 8.0%          |         |            |
| Age 65 to 74  | 345          | 8.1%          | 4,816         | 7.7%          | 37,282         | 6.6%          |         |            |
| Age 75 Plus   | 263          | 6.2%          | 3,734         | 6.0%          | 28,887         | 5.1%          |         |            |
| <b>Total:</b> | <b>4,242</b> | <b>100.0%</b> | <b>62,142</b> | <b>100.0%</b> | <b>562,758</b> | <b>100.0%</b> |         |            |

| Age           | 2000         |                | Brandon       |                | Rutland County |                | Vermont |            |
|---------------|--------------|----------------|---------------|----------------|----------------|----------------|---------|------------|
|               | 2000         | % of Total     | 2000          | % of Total     | 2000           | % of Total     | 2000    | % of Total |
| Age 0 to 5    | 257          | 6.56%          | 3,997         | 6.30%          | 41,709         | 6.85%          |         |            |
| Age 6 to 17   | 711          | 18.15%         | 10,742        | 16.94%         | 105,814        | 17.38%         |         |            |
| Age 18 to 24  | 242          | 6.18%          | 5,287         | 8.34%          | 56,586         | 9.29%          |         |            |
| Age 25 to 34  | 451          | 11.51%         | 7,206         | 11.37%         | 74,567         | 12.25%         |         |            |
| Age 35 to 44  | 676          | 17.26%         | 10,327        | 16.29%         | 101,889        | 16.74%         |         |            |
| Age 45 to 54  | 608          | 15.52%         | 9,936         | 15.67%         | 93,832         | 15.41%         |         |            |
| Age 55 to 64  | 436          | 11.13%         | 6,425         | 10.13%         | 56,920         | 9.35%          |         |            |
| Age 65 to 74  | 277          | 7.07%          | 4,850         | 7.65%          | 40,683         | 6.68%          |         |            |
| Age 75 Plus   | 259          | 6.61%          | 4,630         | 7.30%          | 36,827         | 6.05%          |         |            |
| <b>Total:</b> | <b>3,917</b> | <b>100.00%</b> | <b>63,400</b> | <b>100.00%</b> | <b>608,827</b> | <b>100.00%</b> |         |            |

- The populations of Brandon, Rutland County and Vermont are aging.
- 1990 Median Age was 33.7, 2000 Median Age was 39.3.

## B. HOUSEHOLDS AND FAMILIES

- A Household includes all the persons who occupy a housing unit. Persons not living in households are classified as living in group quarters.

**Figure 7: Number of Households 1990, 2000 – Brandon, Rutland County and Vermont**

| Area           | 1990    | 2000    | % Change 1990-2000 |
|----------------|---------|---------|--------------------|
| Brandon        | 1,519   | 1,572   | 3.5%               |
| Rutland County | 23,690  | 25,678  | 8.4%               |
| Vermont        | 210,650 | 240,634 | 14.2%              |

Source: US Bureau of the Census, Easy Analytic Software, Inc.

1. The large increase in the number of households may be due to the marked increase in one and two person households in Rutland County and Vermont as a whole.

| Household Size | 1980  | 1990  | 2000  | 1980 % of Total | 1990 % of Total | 2000 % of Total |
|----------------|-------|-------|-------|-----------------|-----------------|-----------------|
| 1 Person       | 317   | 330   | 371   | 22.9%           | 21.4%           | 23.6%           |
| 2 Person       | 429   | 500   | 574   | 31.0%           | 32.4%           | 36.5%           |
| 3 Person       | 259   | 302   | 277   | 18.7%           | 19.6%           | 17.6%           |
| 4 Person       | 203   | 269   | 225   | 14.7%           | 17.4%           | 14.3%           |
| 5 Person       | 101   | 106   | 93    | 7.3%            | 6.9%            | 5.9%            |
| 6 + Person     | 76    | 35    | 32    | 5.5%            | 2.3%            | 2.0%            |
| Total:         | 1,385 | 1,542 | 1,572 | 100%            | 100%            | 100%            |

**Figure 8: Households By Type 1980-2000 - Brandon**

Source: US Bureau of the Census, Easy Analytic Software, Inc

**Figure 9: Households by Type 1980-2000 – Rutland County and Vermont**

| Household Size | Rutland County |        |                 |                 | Vermont |         |                 |                 |
|----------------|----------------|--------|-----------------|-----------------|---------|---------|-----------------|-----------------|
|                | 1990           | 2000   | 1990 % of Total | 2000 % of Total | 1990    | 2000    | 1990 % of Total | 2000 % of Total |
| 1 Person       | 5818           | 7,162  | 24.56%          | 27.90%          | 49,366  | 63,112  | 23.44%          | 26.20%          |
| 2 Person       | 8030           | 9,189  | 33.90%          | 35.80%          | 71,273  | 86,630  | 33.83%          | 36.00%          |
| 3 Person       | 4166           | 4,063  | 17.59%          | 15.80%          | 37,158  | 38,195  | 17.64%          | 15.90%          |
| 4 Person       | 3737           | 3431   | 15.77%          | 13.40%          | 34,219  | 34,431  | 16.24%          | 14.30%          |
| 5 Person       | 1397           | 1325   | 5.90%           | 5.20%           | 13,169  | 12,915  | 6.25%           | 5.40%           |
| 6 + Person     | 542            | 508    | 2.29%           | 2.00%           | 5,465   | 5,351   | 2.59%           | 2.20%           |
| Total:         | 23,690         | 25,678 | 100%            | 100%            | 210,650 | 240,634 | 100%            | 100%            |

2. A family consists of a householder and one or more other persons living in the same household who are related to the householder by birth, marriage or adoption.

3. The number of families is decreasing relative to total households (Figure 10), but it is expected that Brandon will continue to have more families relative to total households than Rutland County and Vermont as a whole.

**Figure 10: Families – Brandon, Rutland County and Vermont**

| Area           | Year | Families | Families as % of Total Households |
|----------------|------|----------|-----------------------------------|
| Brandon        | 1990 | 1,116    | 73.47%                            |
|                | 2000 | 1,098    | 69.90%                            |
| Rutland County | 1990 | 16,307   | 68.83%                            |
|                | 2000 | 16,740   | 65.20%                            |
| Vermont        | 1990 | 144,895  | 68.78%                            |
|                | 2000 | 157,763  | 65.60%                            |

Source: US Bureau of the Census, Easy Analytic Software, Inc.

**Figure 11: Families with Children Under 18 years of age**

| Brandon               |               | 1990          | 2000          | 1990 % of Total | 2000 % of Total | % Change 1990-2000 |
|-----------------------|---------------|---------------|---------------|-----------------|-----------------|--------------------|
| Married-couple Family | 437           | 363           | 73.7%         | 72.7%           | -16.9%          |                    |
| Single Male Family    | 27            | 25            | 4.9%          | 5.0%            | -7.4%           |                    |
| Single Female Family  | 112           | 111           | 21.4%         | 22.2%           | -0.9%           |                    |
| <b>Total</b>          | <b>576</b>    | <b>499</b>    | <b>100.0%</b> | <b>100.0%</b>   | <b>-13.4%</b>   |                    |
| Rutland County        |               | 1990          | 2000          | 1990 % of Total | 2000 % of Total | % Change 1990-2000 |
| Married-couple Family | 6,365         | 5,485         | 78.9%         | 71.7%           | -13.8%          |                    |
| Single Male Family    | 410           | 566           | 4.5%          | 7.4%            | 38.0%           |                    |
| Single Female Family  | 1,443         | 1,596         | 16.6%         | 20.9%           | 10.6%           |                    |
| <b>Total</b>          | <b>8,218</b>  | <b>7,647</b>  | <b>100.0%</b> | <b>100.0%</b>   | <b>-6.9%</b>    |                    |
| Vermont               |               | 1990          | 2000          | 1990 % of Total | 2000 % of Total | % Change 1990-2000 |
| Married-couple Family | 59,353        | 55,907        | 78.7%         | 64.1%           | -5.8%           |                    |
| Single Male Family    | 4,028         | 9,078         | 4.9%          | 10.4%           | 125.4%          |                    |
| Single Female Family  | 13,334        | 22,272        | 16.4%         | 25.5%           | 67.0%           |                    |
| <b>Total</b>          | <b>76,715</b> | <b>87,257</b> | <b>100.0%</b> | <b>100.0%</b>   | <b>13.7%</b>    |                    |

The Census Bureau divides families into types: married couple, single male head of family (no wife present), single female head of family (no husband present). Figure 11 shows the change in the type of family in which children in Brandon, Rutland County and Vermont are growing up.

## C. INCOME

4. Per capita income is the average income computed for every man, woman, and child in a particular group. The Census Bureau derived per capita income by dividing the total income of a particular group by the total population in that group (excluding patients or inmates in institutional quarters).
5. Median income is the amount which divides the income distribution into two equal groups, half having incomes above the median, half having incomes below the median. The medians for households, families, and unrelated individuals are based on all households, families, and unrelated individuals, respectively. The medians for people are based on people 15 years old and over with income.

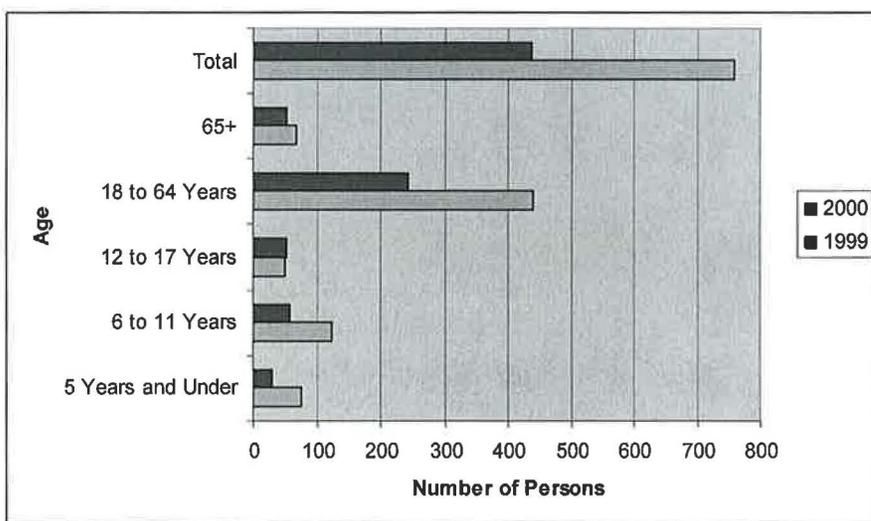
**Figure 12: Per Capita Income, Median Family Income and Median Household Income**

| Year | Brandon           |                      |                         | Rutland County    |                      |                         | Vermont           |                      |                         |
|------|-------------------|----------------------|-------------------------|-------------------|----------------------|-------------------------|-------------------|----------------------|-------------------------|
|      | Per Capita Income | Median Family Income | Median Household Income | Per Capita Income | Median Family Income | Median Household Income | Per Capita Income | Median Family Income | Median Household Income |
| 1989 | \$12,068          | \$27,917             | \$26,356                | \$12,780          | \$32,743             | \$28,229                | \$13,527          | \$34,780             | \$29,792                |
| 1999 | \$20,516          | \$42,455             | \$35,810                | \$18,874          | \$44,742             | \$36,743                | \$20,625          | \$48,625             | \$40,856                |

Source: 1990 and 2000 US Census data.

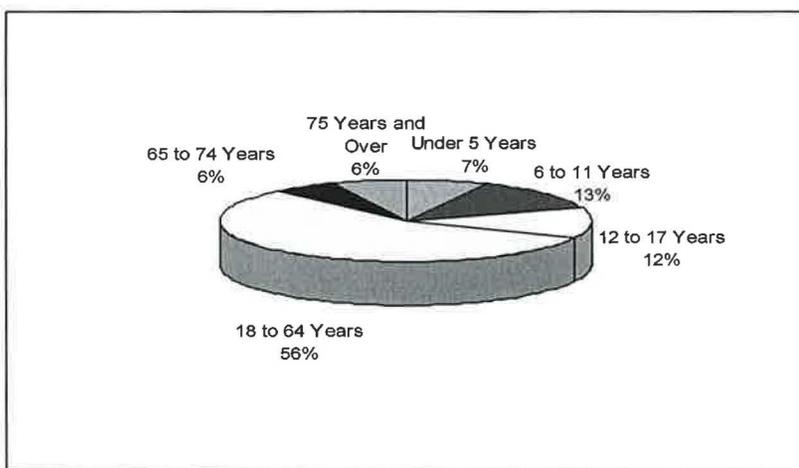
- Following the Office of Management and Budget's (OMB's) Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If a family's total income is less than that family's threshold, then that family, and every individual in it, is considered poor. The poverty thresholds do not vary geographically, but they are updated annually for inflation with the Consumer Price Index (CPI-U). The official poverty definition counts money income before taxes and excludes capital gains and non-cash benefits (such as public housing, medic-aid, and food stamps).
- The poverty status of a person who is a family member is determined by the family income and its relationship to the appropriate poverty threshold for that family. The poverty status of an unrelated individual is determined by his or her own income in relation to the appropriate poverty threshold.
- The general poverty rate has increased in Brandon. In 1980, 12.2% of the population was in poverty, and by 1990, this had increased to 17.9%. However, the 2000 census figures show a decrease in general poverty rate at 12.4% of the population. Thirty-two Brandon families, or 6.8% of Brandon families, were in poverty in 2000. Of those 32 families, 26 were female householders with no husband present.

**Figure 13: Brandon Persons in Poverty by Age Comparison 1999 and 2000**



Source: US Bureau of the Census

**Figure 14: 2000 Persons in Poverty by Age**



- 2000 Brandon Total Persons (actual number) in poverty was 437 or 12.4% of the population for whom poverty is determined.<sup>2</sup>

<sup>2</sup> This is not the total population because it excludes certain people such as those living in group quarters.

## D. EDUCATION

Figure 15: Educational Attainment, Town of Brandon 1990 and 2000

| Level of Education Completed     | 1990  | Percent 1990 | 2000  | Percent 2000 | % Change 1990-2000 |
|----------------------------------|-------|--------------|-------|--------------|--------------------|
| Less than 9th Grade              | 418   | 13.24%       | 164   | 6.34%        | -60.77%            |
| 9th to 12th Grade No Diploma     | 481   | 15.23%       | 357   | 13.81%       | -25.78%            |
| High School Diploma              | 1,211 | 38.35%       | 1,007 | 38.96%       | -16.85%            |
| Some College                     | 473   | 14.98%       | 448   | 17.33%       | -5.29%             |
| Associate Degree                 | 154   | 4.88%        | 128   | 4.95%        | -16.88%            |
| Bachelors Degree                 | 280   | 8.87%        | 387   | 14.97%       | 38.21%             |
| Graduate Degree or More          | 141   | 4.46%        | 94    | 3.64%        | -33.33%            |
| Four or More Years of Education  | 421   | 13.33%       | 481   | 18.61%       | 14.25%             |
| Total Persons 25 years and older | 3158  | 100%         | 2585  | 100%         | -18.14%            |

Figure 16: Educational Attainment, 2000 – Rutland County and Vermont

| Level of Education Completed     | Rutland County |           | Vermont |           |
|----------------------------------|----------------|-----------|---------|-----------|
|                                  | 2000           | % of 2000 | 2000    | % of 2000 |
| Less than 9th Grade              | 2,390          | 4.91%     | 18,189  | 5.46%     |
| 9th to 12th Grade No Diploma     | 5,513          | 11.33%    | 35,793  | 10.75%    |
| High School Diploma              | 17,182         | 35.31%    | 108,311 | 32.51%    |
| Some College                     | 9,788          | 20.11%    | 66,651  | 20.01%    |
| Associate Degree                 | 3,378          | 6.94%     | 21,499  | 6.45%     |
| Bachelors Degree                 | 6,974          | 14.33%    | 53,744  | 16.13%    |
| Graduate Degree or More          | 3,442          | 7.07%     | 28,926  | 8.68%     |
| Total Persons 25 years and older | 48,667         | 100%      | 333,113 | 100%      |

Source: 2000 Census

## E. EMPLOYMENT

**Figure 17: Brandon Unemployment Rate, 1990-2000**

| Year | Annual Average |
|------|----------------|
| 1990 | 5.10%          |
| 1991 | 8.40%          |
| 1992 | 9.20%          |
| 1993 | 9.90%          |
| 1994 | 8.20%          |
| 1995 | 5.90%          |
| 1996 | 5.70%          |
| 1997 | 4.50%          |
| 1998 | 4.50%          |
| 1999 | 4.70%          |
| 2000 | 5.20%          |

**Figure 18: Employment by Industry 1990 and 1999**

| Brandon                               | 1990 | 1999 | 1990 % of Total | 1999 % of Total | % Change 1990-1999 |
|---------------------------------------|------|------|-----------------|-----------------|--------------------|
| Unemployed Residents (Annual Average) | 104  | 98   |                 |                 | -5.8%              |
| Unemployment Rate (Annual Average)    | 5.1% | 4.7% |                 |                 |                    |
| Employed Residents (Annual Average)   | 1931 | 1966 |                 |                 | 1.8%               |
| Labor Force (Annual Average)          | 2035 | 2064 |                 |                 | 1.4%               |
| U.I. COVERED EMPLOYMENT               |      |      |                 |                 |                    |
| Total                                 | 1645 | 1581 | 100.0%          | 100.0%          | -3.9%              |
| Private                               | 878  | 1225 | 53.4%           | 77.5%           | 39.5%              |
| Agriculture, Forestry and Fishing     | n/a  | n/a  | n/a             | n/a             |                    |
| Contract Construction                 | 82   | 95   | 5.0%            | 6.0%            | 15.9%              |
| Manufacturing                         | 386  | 626  | 23.5%           | 39.6%           | 62.2%              |
| Durable                               | 343  | 584  | 20.9%           | 36.9%           | 70.3%              |
| Nondurable                            | 43   | 42   | 2.6%            | 2.7%            | -2.3%              |
| Transportation and Utilities          | n/a  | n/a  | n/a             | n/a             |                    |
| Wholesale                             | 16   | 14   | 1.0%            | 0.9%            | -12.5%             |
| Retail Trade                          | 173  | 225  | 10.5%           | 14.2%           | 30.1%              |
| Finance, Insurance and Real Estate    | 41   | 50   | 2.5%            | 3.2%            | 22.0%              |
| Services                              | 159  | 199  | 9.7%            | 12.6%           | 25.2%              |
| Government Total                      | 767  | 356  | 46.6%           | 22.5%           | -53.6%             |

Sources: VT Department of Employment and Training

US Bureau of Labor Statistics

- Information on industry relates to the kind of business conducted by a person's employing organization.
- Covered Employment includes the employers covered by the unemployment compensation law. The major groups excluded from coverage are most agricultural production firms and the self-employed.
- The annual average wage in Brandon in 2005 for private industry (covered employment) was \$27,488. The annual average manufacturing wage was \$30,982. There has been a dramatic increase of 113% in the Construction wage since 1990, and a similar increase (26%) from 2000 to 2005

**Figure 19: U.I. Covered Employment – Annual Average Wage**

| <b>Brandon</b>                     | <b>1990</b> | <b>2000</b> | <b>2005</b> |
|------------------------------------|-------------|-------------|-------------|
| Total                              | \$18,932    | \$23,734    | \$27,488    |
| Private                            | \$16,913    | \$23,200    | \$26,850    |
| Agriculture, Forestry and Fishing  | n/a         | n/a         | n/a         |
| Construction                       | \$20,051    | \$33,796    | \$42,746    |
| Manufacturing                      | \$22,124    | \$25,909    | \$30,982    |
| Durable                            | \$21,122    | \$25,530    | n/a         |
| Nondurable                         | \$30,092    | \$31,875    | n/a         |
| Transportation and Utilities       | n/a         | n/a         | n/a         |
| Service Providing Total            | \$11,808    | \$18,376    | \$20,638    |
| Wholesale                          | \$17,684    | n/a         | n/a         |
| Retail Trade                       | \$10,583    | \$16,543    | \$22,688    |
| Finance, Insurance and Real Estate | \$18,598    | \$30,236    | \$32,658    |
| Government Total                   | \$21,246    | \$25,579    | \$29,237    |

Source: Covered Employment and Wages (ES-202), VT Dept. of Employment and Training

Figure 20: Demographic-Economic Comparison of Rutland County Towns

Demographic - Economic Comparison

|                       | Population<br>2005 <sup>1</sup> | Percent<br>Share<br>County | Annual<br>Average<br>Empl. 2005 <sup>2</sup> | Annual<br>Average<br>Wage<br>2005 <sup>2</sup> (\$) | Median<br>Adjusted<br>Income<br>2005 <sup>4</sup> (\$) | Effective<br>Homestead<br>Education<br>Tax Rate<br>2006 <sup>3</sup> |
|-----------------------|---------------------------------|----------------------------|--|---|--|--|
| Vermont               | 623,050                         | n/a                        | 300,941                                      | 34,199  | 30,141   | n/a  |
| Rutland County        | 63,743                          | 100.0%                     | 29,693                                       | 32,194  | n/a  | n/a  |
| Benson                | 1,036                           | 1.6%                       | 135  | 22,907  | 27,775   | 1.14   |
| <b>Brandon</b>        | <b>3,947</b>                    | <b>6.2%</b>                | <b>1,556</b>                                 | <b>27,488</b>                                       | <b>27,285</b>  | <b>1.24</b>  |
| Castleton             | 4,368                           | 6.9%                       | 1,546  | 28,024  | 28,748   | 1.15   |
| Chittenden            | 1,227                           | 1.9%                       | 160  | 25,864  | 31,144   | 1.24   |
| Clarendon             | 2,891                           | 4.5%                       | 1,345  | 27,776  | 28,547   | 1.39   |
| Danby                 | 1,292                           | 2.0%                       | 264  | 35,854  | 29,268   | 0.80   |
| Fair Haven            | 2,969                           | 4.7%                       | 962  | 24,492  | 24,709   | 1.30   |
| Hubbardton            | 777                             | 1.2%                       | 15   | 17,066  | 35,035   | 0.88   |
| Ira                   | 452                             | 0.7%                       | 13   | 20,146  | 38,096   | 1.11   |
| Killington            | 1,134                           | 1.8%                       | 1,749  | 24,921  | 23,625   | 1.59   |
| Mendon                | 1,068                           | 1.7%                       | 422  | 26,913  | 37,387   | 1.28   |
| Middletown<br>Springs | 820                             | 1.3%                       | 141  | 29,327  | 29,958   | 1.48   |
| Mount Holly           | 1,236                           | 1.9%                       | 188  | 27,396  | 30,594   | 1.29   |
| Mount Tabor           | 202                             | 0.3%                       | 18   | 18,354  | 31,797   | 0.88   |
| Pawlet                | 1,442                           | 2.3%                       | 294  | 25,472  | 26,929   | 1.21   |
| Pittsfield            | 424                             | 0.7%                       | 132  | 31,916  | 31,659   | 1.11   |
| Pittsford             | 3,213                           | 5.0%                       | 819  | 36,791  | 32,628   | 1.39   |
| Poultney              | 3,577                           | 5.6%                       | 989  | 28,379  | 26,123   | 1.41   |
| Proctor               | 1,847                           | 2.9%                       | 373  | 47,473  | 31,145   | 1.50   |
| Rutland City          | 17,046                          | 26.7%                      | 13,452                                       | 34,676  | 24,251   | 1.10   |
| Rutland Town          | 4,135                           | 6.5%                       | 3,768  | 36,666  | 34,809   | 1.32   |
| Shrewsbury            | 1,141                           | 1.8%                       | 241  | 27,144  | 32,464   | 1.19   |
| Sudbury               | 610                             | 1.0%                       | 20   | 21,411  | 36,916   | 1.39   |
| Tinmouth              | 615                             | 1.0%                       | 32   | 16,273  | 26,577   | 1.08   |
| Wallingford           | 2,322                           | 3.6%                       | 421  | 25,623  | 32,220   | 1.39   |
| Wells                 | 1,115                           | 1.7%                       | 119  | 21,049  | 27,248   | 1.14   |
| West Haven            | 308                             | 0.5%                       | 16   | 15,118  | 27,068   | 1.36   |
| West Rutland          | 2,529                           | 4.0%                       | 504  | 27,588  | 26,129   | 1.21   |

<sup>1</sup> Vermont Department of Health

<sup>2</sup> Vermont Department of Labor: Quarterly Census of Employment & Wages

<sup>3</sup> Vermont Division of Property Valuation and Review

<sup>4</sup> Vermont Department of Taxes, Vermont Tax Statistics, Median Adjusted Gross Income by School District

Source: Vermont: An Economic-Demographic Profile Series. 2007.

**Figure 21: Rutland Country – 35 Largest Employers**

| <b>Employer</b>                 | <b>Location</b> | <b>Number of employees</b> |
|---------------------------------|-----------------|----------------------------|
| GE Aircraft Engines             | Rutland         | 1300                       |
| Rutland Regional Medical Center | Rutland         | 1300                       |
| Killington/Pico Mountain Resort | Killington      | 570                        |
| Central VT Public Service Corp. | Rutland         | 540                        |
| Casella Waste Systems           | Rutland         | 525                        |
| Community Care Network          | Rutland         | 374                        |
| Metro Group                     | Rutland         | 300                        |
| Omya Industries, Inc.           | Proctor         | 300                        |
| Castleton State College         | Castleton       | 227                        |
| Hubbardton Forge Corporation    | Castleton       | 206                        |
| Carris Reels, Inc.              | Rutland         | 150                        |
| Rutland Herald                  | Rutland         | 130                        |
| Russell Construction Services   | Rutland         | 125                        |
| Rutland Plywood Corp.           | Rutland         | 125                        |
| Joseph P. Carrara & Sons Inc.   | N. Clarendon    | 112                        |
| New England Woodcraft, Inc.     | Brandon         | 110                        |
| Green Mountain College          | Poultney        | 101                        |
| Nexus Custom Electronics        | Brandon         | 100                        |
| Vermont Tubbs, LLC              | Brandon         | 100                        |
| Midway Oil Corp & Affiliates    | Rutland         | 95                         |
| VT Electric Power Company       | Rutland         | 94                         |
| Holiday Inn Centre of VT        | Rutland         | 90                         |
| Skyline Corporation             | Fair Haven      | 90                         |
| Questech Metals                 | Rutland         | 75                         |
| Heritage Family Credit Union    | Rutland         | 70                         |
| McKernon Group, Inc.            | Brandon         | 70                         |
| VT Store Fixture Corp.          | Danby           | 68                         |
| Deter Security Inc.             | Rutland         | 65                         |
| Kinney Pike Insurance, Inc.     | Rutland         | 64                         |
| Naylor & Breen Builders, Inc.   | Brandon         | 61                         |
| Alderman's Chevrolet            | Rutland         | 60                         |
| Mill River Lumber Ltd.          | N. Clarendon    | 60                         |
| Tuttle Law Print, Inc.          | Rutland         | 60                         |
| Kinney Motors LTD               | Rutland         | 58                         |
| Tuttle Printing and Engraving   | Rutland         | 58                         |

*Source: Vermont Business Magazine, Rutland County Profile, 2005 (cited in Rutland Region Comprehensive Economic Development Strategy, 2007 Draft)*

## F. HOUSING

Figure 22: Brandon Housing Units 1990-2000

| Occupied Housing Units by Tenure and By Number of Units in Structure | 1990               |                  | 2000               |                  | 2000-1990          |                    |
|--|--------------------|------------------|--------------------|------------------|--------------------|--------------------|
|  | Units in Structure | Percent of Total | Units in Structure | Percent of Total | # Change 2000-1990 | % Change 2000-1990 |
| TOTAL ( <i>Owners and Renters</i> )                                  | 1496               | 100%             | 1710               | 100%             | 214                | 14%                |
| 1  | 937                | 63%              | 1136               | 66%              | 199                | 21%                |
| 2  | 114                | 8%               | 94                 | 5%               | -20                | -18%               |
| 3+   | 206                | 14%              | 151                | 9%               | -55                | -27%               |
| Mobile homes   | 212                | 14%              | 191                | 11%              | -21                | -10%               |
| Other  | 27                 | 2%               | 0                  | 0%               | -27                | -100%              |
| TOTAL ( <i>Owners</i> )  | 1092               | 100.0%           | 1191               | 100.0%           | 99                 | 9%                 |
| 1  | 849                | 77.7%            | 1028               | 86.3%            | 179                | 21%                |
| 2  | 41                 | 3.8%             | 6                  | 0.5%             | -35                | -85%               |
| 3+   | 29                 | 2.7%             | 7                  | 0.6%             | -22                | -76%               |
| Mobile homes   | 162                | 14.8%            | 147                | 12.3%            | -15                | -9%                |
| Other  | 11                 | 1.0%             | 0                  | 0.0%             | -11                | -100%              |
| TOTAL ( <i>Renters</i> )   | 404                | 100.0%           | 381                | 100.0%           | -23                | -6%                |
| 1  | 88                 | 21.8%            | 108                | 28.3%            | 20                 | 23%                |
| 2  | 73                 | 18.1%            | 88                 | 23.1%            | 15                 | 21%                |
| 3+   | 177                | 43.8%            | 144                | 37.8%            | -33                | -19%               |
| Mobile homes   | 50                 | 12.4%            | 44                 | 11.5%            | -6                 | -12%               |
| Other  | 16                 | 4.0%             | 0                  | 0.0%             | -16                | -100%              |
| Total Units Occupied   | 1496               | 100.0%           | 1710               | 100.0%           | 214                | 14%                |
| Owner Occupied   | 1092               | 73.0%            | 1191               | 69.6%            | 99                 | 9%                 |
| Renter Occupied  | 404                | 27.0%            | 381                | 22.3%            | -23                | -6%                |
| Persons per Owner - Occupied Housing Unit                            | 2.9                |                  | 2.6                |                  | -0.3               | -11%               |
| Persons per Renter - Occupied Housing Unit                           | 2.3                |                  | 2.3                |                  | 0.0                | -2%                |
| Persons per Occupied Housing Unit                                    | 2.7                |                  | 2.5                |                  | -0.2               | -8%                |

Source: Vermont Housing Data 2000: <http://www.housingdata.org/profile>

- The percentage of houses built between 1990 and 2000 is 11.9%, while the portion of houses built in 1939 or earlier is 40.6% of the housing stock (2000 Census data: <http://factfinder.census.gov>).

## **Housing Agencies, Organizations and Funding Sources<sup>3</sup>**

### **Federal and State Housing Agencies**

#### **Vermont Department of Housing and Community Affairs (DHCA)**

John S. Hall, Commissioner  
National Life Building, 6th Floor  
Montpelier, VT 05620-0501  
**Phone:** (802) 828-3211  
**Fax:** (802) 828-2928  
**Email:** [john.s.hall@state.vt.us](mailto:john.s.hall@state.vt.us)  
**Website:** <http://www.dhca.state.vt.us/>

#### **Vermont Housing and Conservation Board (VHCB)**

Gus Seelig, Executive Director  
149 State Street  
Montpelier, VT 05602  
**Phone:** (802) 828-3250  
**Fax:** (802) 828-3203  
**Email:** [gseelig@vhcb.org](mailto:gseelig@vhcb.org)  
**Website:** [www.vhcb.org](http://www.vhcb.org)

#### **Vermont Housing Finance Agency (VHFA)**

Sarah Carpenter, Executive Director  
PO Box 408 - 164 St. Paul Street  
Burlington, VT 05402-0408  
**Phone:** (802) 864-5743 or (800) 339-5866  
**Fax:** (802) 864-5746  
**Email:** [scarpenter@vhfa.org](mailto:scarpenter@vhfa.org)  
**Website:** [www.vhfa.org](http://www.vhfa.org)

#### **Vermont State Housing Authority (VSHA)**

Richard Williams, Executive Director  
1 Prospect Street  
Montpelier, VT 05602-3556  
**Phone:** (802) 828-3295  
**Fax:** (802) 828-3248  
**Email:** [richard@vsha.org](mailto:richard@vsha.org)  
**Website:** [www.vsha.org](http://www.vsha.org)

#### **USDA-Rural Development (RD)**

Jolinda LaClair, State Director  
89 Main Street, City Center, 3rd Floor  
Montpelier, VT 05602  
**Phone:** (802) 828-6002  
**Fax:** (802) 828-6018  
**Email:** [jolinda.laclair@vt.usda.gov](mailto:jolinda.laclair@vt.usda.gov)  
**Website:** [www.rurdev.usda.gov/vt](http://www.rurdev.usda.gov/vt)

### **Rutland Region Organizations**

#### **Rutland Housing Authority**

Kevin Loso, Executive Director  
5 Tremont Street  
Rutland, VT 05701  
**Phone:** (802) 775-2926 x13  
**Fax:** (802) 747-6180  
**Email:** [rhavt@sover.net](mailto:rhavt@sover.net)

#### **Vermont State Housing Authority (VSHA)**

Richard Williams, Executive Director  
1 Prospect Street  
Montpelier, VT 05602-3556  
**Phone:** (802) 828-3295  
**Fax:** (802) 828-3248  
**Email:** [Richard@vsha.org](mailto:Richard@vsha.org)  
**Website:** [www.vsha.org](http://www.vsha.org)

#### **Cathedral Square Corporation**

Nancy R. Eldridge, Executive Director  
308 Pine Street  
Burlington, VT 05401  
**Phone:** (802) 863-2224  
**Fax:** (802) 863-6661  
**Email:** [eldridge@cathedralsquare.org](mailto:eldridge@cathedralsquare.org)  
**Website:** [www.cathedralsquare.org](http://www.cathedralsquare.org)  
*Serving all Vermont counties*

#### **Housing Foundation Inc**

Richard Williams  
1 Prospect Street  
Montpelier, VT 05602-3556  
**Phone:** (802) 828-3295  
**Fax:** (802) 828-3248  
**Email:** [richard@vsha.org](mailto:richard@vsha.org)  
**Website:** [www.vsha.org](http://www.vsha.org)  
*Serving all Vermont Counties*

<sup>3</sup> Department of Housing & Community Affairs, Housing Division, Winter 2007/2008, <<http://www.dhca.state.vt.us/Housing/organizations.htm>>

**Rutland County Community Land Trust, Inc.**

Elisabeth Kulas, Executive Director  
13 Center St., 2<sup>nd</sup> Floor  
Rutland, VT 05701  
**Phone:** (802) 775-3139  
**Fax:** (802) 775-0434  
**Email:** [EKulas@rcclt.org](mailto:EKulas@rcclt.org)  
*Serving Rutland County*

**Rutland Regional Planning Commission**

Mark Blucher, Executive Director  
PO Box 965 – 67 Merchants Row  
Rutland, VT 05702  
**Phone:** (802) 775-0871 or 800-464-7900  
**Fax:** (802) 775-1766  
**Email:** [mblucher@rutlandrpc.org](mailto:mblucher@rutlandrpc.org)  
**Website:** [www.rutlandrpc.org](http://www.rutlandrpc.org)

**Housing Contact:** Paul Conner, Regional Planner

**Phone:** (802) 775-0871 or 800-464-7900  
**Email:** [pconner@rutlandrpc.org](mailto:pconner@rutlandrpc.org)

**Rutland Economic Development Corporation**

JoAnn Hollis, Executive Director  
112 Quality Lane  
Rutland, VT 05701  
**Phone:** (802) 773-9147 x205  
**Fax:** (802) 773-8009  
**Email:** [redc@rutlandeconomy.com](mailto:redc@rutlandeconomy.com)  
**Website:** [www.rutlandeconomy.com](http://www.rutlandeconomy.com)

**Bennington-Rutland Opportunity Council Inc (BROC)**

Linda Rooker, Executive Director  
60 Center Street  
Rutland, VT 05701  
**Phone:** (802) 775-0879 or (802) 775-0878  
**Phone:** Bennington Office (802) 447-7515  
**Fax:** (802) 775-9949  
**Email:** [lrooker@broc.org](mailto:lrooker@broc.org)  
**Website:** [www.broc.org](http://www.broc.org)  
*Serving Bennington and Rutland Counties (excluding Pittsfield)*

**Southwestern Vermont Council on Aging**

Diane Novak, Director  
East Ridge Professional Building  
1085 US Route 4, Unit 2B  
Rutland, VT 05701-9039  
**Phone:** (802) 786-5990 or 1-800-642-5119  
**Fax:** (802) 786-5994  
**Email:** [dianenovak@svcoa.org](mailto:dianenovak@svcoa.org)

**Rutland County Housing Coalition**

Pat Loughan, Executive Director  
Rutland County Housing Coalition  
PO Box 382 - 72 Wales St.  
Rutland, VT 05702  
**Phone:** (802) 775-9286, ext. 205  
**Email:** [irishpfl@sover.net](mailto:irishpfl@sover.net)

**Figure 23: Brandon Seasonal, Recreational or Occasional Use Housing**

| <b>Brandon</b>                                   | <b>1990</b> | <b>2000</b> |
|--|-------------|-------------|
| TOTAL Housing Units                              | 1617        | 1710        |
| For Seasonal, Recreational or Occasional Use     | 25          | 46          |
| Percent Seasonal, Recreational or Occasional Use | 1.5%        | 2.7%        |

Source: Vermont Housing Data 2000

- A negligible 2.7 % of Brandon’s total housing is considered Seasonal, Recreational, or Occasional Use.

## G. TRANSPORTATION

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### Highways

By far the most important component of the transportation system in Brandon is the highway system. The highway system is also necessary for school buses and emergency vehicles, and provides for the movement of goods, as well as people. Thus, it has a significant impact on economic development. Typically, areas with better highway accessibility develop economically, and those with poorer highway accessibility do not.

To begin to plan for highway improvements, an inventory of highways by class is needed. Highways are classified in two ways, functional classification and state classification. Under the functional classification system, routes are assigned to categories that reflect their function and overall importance. In functional classification, highways are classified as arterials, collectors, or local streets:

Arterials: These highways, which are designed to accommodate volumes of more than 500 vehicles per hour, carry the bulk of through-traffic. Protection of the traffic-carrying function of arterial highways is of great importance to the Town. In addition to serving as conduits for interstate and inter-regional transportation and commerce, they also carry large numbers of commuters, shoppers, and visitors. If they become congested or otherwise decline in performance, there can be serious economic and social impacts.

Collectors: These roads provide for through traffic on a local level. They connect arterial and residential streets.

Local streets: These are designed to allow access to adjacent land uses, not to carry through traffic. Careful attention to this design principle is needed to ensure that residential streets are not transformed into collectors.

#### According to functional classification:

- Arterials come in two forms, major and minor. Major arterials connect high volume generators of traffic, such as cities and other major arterials. Although they make up a small portion of the total highway network (between five and ten percent), major arterials carry roughly one-third of all miles traveled. Most traffic on major arterials is *through-traffic*.
- Minor arterials connect rural areas and collector roads. They make up between ten and twenty percent of the total highway network yet carry roughly half of all miles traveled, much of it for local purposes.
- Collectors provide access to residential areas and uses such as parks and churches and serve as routes for transit where it is available. They convey traffic from local streets to minor and major arterials. They serve extensive local traffic and some through traffic.
- Local streets provide access to homes, small businesses, and the like. Because of their nature, they should receive virtually no through traffic.

Based on these definitions, a functional classification of Brandon roads was undertaken and is listed in the following table.

**Figure 24: Functional Classification of Brandon Roads**

| Town of Brandon |  |              |
|-----------------|--|--------------|
| Arterial        | Name And/Or Limits                     | Jurisdiction |
| US 7            | Running north-south                    | State        |
| VT 73           | Running east-west                      | State        |
| Collector       | Name And/Or Limits                     | Jurisdiction |
| VT 53           | North Street                           | Town         |
|                 | McConnell Road                         | Town         |
|                 | Union Street/Florence Road             | Town         |
|                 | Arnold District Road                   | Town         |
| Urban Compact   |  |              |
| Arterial        | Name And/Or Limits                     | Jurisdiction |
| US 7            | Franklin St., Center St. and Grove St. | State        |
| VT 73           | Marble St., Park St. and Champlain St. | Town         |
| Collector       | Name And/Or Limits                     | Jurisdiction |
|                 | Carver Street                          | Town         |
|                 | Union Street                           | Town         |
|                 | West Seminary                          | Town         |
|                 | Pearl Street                           | Town         |
|                 | Prospect Street                        | Town         |

Source: Brandon Town Plan adopted 2002 and re-adopted 2007

**Comment [s1]:** I think this information is current because I found two lists of changes to the 1997 Functional Classification Map, and there are no changes listed for Brandon since 1997 that I can find.

The state classification system primarily refers to highway conditions. This system is the basis on which the state allocated highway aid for municipalities. The four state classifications are listed in the table below.

### State Classification System

*As specified in Title 19 of the Vermont State Statutes*

- Class 1 town highways are designated by the Transportation Board and are extensions of a state highway route and carry a state highway route number.
- Class 2 town highways are designated by the Selectboard and approved by the Transportation Board and secure trunk lines of improved highways from town to town.
- Class 3 town highways are designated by the Selectboard after consultation with a representative of the Transportation Board and are
  - A traveled town highway other than Class 1 or 2
  - A Town highway that is negotiable under normal conditions all seasons of the year by a standard manufactured pleasure car
  - A town highway with sufficient surface and base, adequate drainage, and width to permit winter maintenance

- Class 4 town highways are designated by the Selectboard and are un-traveled town highways, trails and pent roads, town highways with gates denying public access, and all town highways not classified as Class 1, 2, or 3 highways.

Using the State's classification system, the following table compiles Brandon's roads by class.

**Figure 25: Brandon Highway mileage**

| Highway Type                                      | Brandon Mileage |
|---|-----------------|
| Class 1   | 1.948           |
| Class 2   | 16.140          |
| Class 3   | 39.620          |
| Class 4   | 8.630           |
| Total   | 66.338          |
| State Highways                                    | 12.991          |
| <b>Total Class 1, 2, and 3 and State Highways</b> | <b>70.699</b>   |
| <b>Total All Highways</b>                         | <b>79.329</b>   |

Source: Vermont Agency of Transportation (VTrans) 2007

## Bridges

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 non-local funding. However, due to demand, usually only bridges with much lower scores actually receive funding.

### What do Brandon's bridges score?

Bridges and highways have designated weight capacities. The state limit for roads and bridges is 55,000 pounds; the local limit is 24,000 pounds.

**Figure 26: Brandon Bridges with Weight Restrictions**

| TH# | Bridge # | Road Name      | Weight Limit | Restrictions              |
|-----|----------|----------------|--------------|---------------------------|
| 22  | 22       | Churchill Road | 0            | Bridge Closed to Vehicles |

Source: Town of Brandon March 2008

Note: It is possible to operate an over weight vehicle across a weight-restricted structure, with the exception of those listed above, by obtaining an Excess Weight Permit (Single Vehicle) from the Public Works Superintendent.

There are two historic bridges in the town of Brandon and both span Otter Creek:

**Figure 27: Historic Bridges of Brandon**

| TH # | Bridge # | Road Name     | Spanning    | Bridge Type |
|------|----------|---------------|-------------|-------------|
| 4    | CB 12    | Pearl Street  | Otter Creek | Covered     |
| 42   | B 25     | Carver Street | Otter Creek | Pony Truss  |

### **Traffic Volume**

Highway professionals describe traffic volumes in different ways, the most common of which is the Average Daily Traffic (ADT) statistic. The ADT represents the total traffic volume passing over the road in a year, averaged on a daily basis. Approximately ten percent of ADT takes place during the busiest, or peak, hour. The capacity of a lane of highway is approximately 1600 to 1800 vehicles.

Figure 28: Automatic Traffic Recorder Station History - Brandon

| Station | Route | 2006  | 2005 | 2004  | 2003 | 2002  | 2001 | 2000  | 1999 | 1998 | 1997 | 1996  | 1995  | 1994 | 1993 | 1992 | 1991 |
|---------|-------|-------|------|-------|------|-------|------|-------|------|------|------|-------|-------|------|------|------|------|
| S6R349  | VT53  |       |      |       | 1500 |       |      |       |      |      |      |       | 1900  |      |      |      | 1700 |
| S6R492  | TH8   |       |      |       | 1100 |       |      |       | 1700 |      |      |       | 1300  |      |      |      |      |
| S6R493  | TH31  |       |      |       |      |       | 300  |       |      |      |      |       |       |      |      |      |      |
| S6R431  | TH4   |       |      |       |      |       |      |       |      |      |      |       |       |      |      | 580  |      |
| S6R180  | TH62  |       |      |       |      |       | 550  |       |      |      |      |       |       |      |      |      |      |
| S6R350  | TH7   |       |      | 590   |      |       |      |       |      |      |      |       |       |      |      |      |      |
| S6R454  | TH7   |       |      | 990   |      |       |      |       |      |      |      |       |       |      |      |      |      |
| S6R146  | VT73  |       |      |       |      |       |      |       |      |      |      |       |       | 1400 |      |      |      |
| S6R430  | VT73  |       |      |       |      |       |      |       |      |      |      |       |       |      |      | 1800 |      |
| S6R156  | VT73  |       |      |       |      | 1800  |      |       |      | 1900 |      |       | 1600  |      |      |      |      |
| S6R162  | VT73  |       |      |       |      | 3600  |      |       |      | 3800 |      |       |       | 4000 |      |      |      |
| S6R163  | VT73  |       |      |       |      |       |      |       |      |      |      |       |       |      |      |      | 3700 |
| S6R136  | VT73  |       |      |       |      | 2500  |      |       |      | 2500 |      |       |       |      |      |      | 3000 |
| S6R148  | VT73  |       |      |       |      | 1100  |      |       |      | 1100 |      |       |       | 1000 |      |      |      |
| S6R427  | US7   | 7500  |      | 8000  |      | 7500  |      | 7700  |      | 7800 |      |       |       | 7500 |      |      |      |
| S6R161  | US7   |       |      |       |      |       |      |       |      |      |      |       |       |      |      |      | 7500 |
| S6R159  | US7   |       |      |       |      |       |      |       |      |      |      |       | 10400 |      |      |      |      |
| S6R158  | US7   | 10600 |      | 11500 |      | 10600 |      | 10400 |      |      |      | 10700 | 10100 |      |      |      |      |
| S6R429  | US7   |       |      |       |      | 8000  |      |       |      |      |      |       |       |      |      |      | 7300 |
| S6R100  | US7   | 6300  |      | 6400  |      |       |      | 5800  |      | 6500 |      | 6200  |       |      |      |      | 5900 |
| P6R100  | US7   | 6100  | 6100 | 6200  | 6000 | 6100  |      |       |      |      |      |       |       |      |      |      |      |

Source: Automatic Traffic Recorder Station History. Vtrans 2007.

## Trucks

Trucks are an important part of the economy and an important part of the ADTs. The majority of commodities in Vermont are carried by truck. The Federal Government establishes the legal load capacity for the Interstate at 80,000 pounds. Vermont law allows milk and forest product trucks to weigh as much as 92,000 pounds. Research demonstrates that these heavily loaded trucks severely impact the structural integrity of the roadway.

Figure 29: Brandon Highway Weight Restrictions

| TH# | Bridge # | Road Name                    | Limit* (lbs)   | Restrictions            |
|-----|----------|------------------------------|----------------|-------------------------|
| 1   | 114      | Grove Street                 | State Limit    | None                    |
| 1   |          | Conant Square                | State Limit    | None                    |
| 1   |          | Center Street                | State Limit    | None                    |
| 1   |          | Park Street (portion)        | State Limit    | None                    |
| 1   |          | Franklin Street              | State Limit    | None                    |
| 2   |          | Park Street (portion)        | State Limit    | None                    |
| 2   |          | Marble Street                | State Limit    | None                    |
| 3   |          | Champlain Street             | State Limit    | None                    |
| 4   | 4        | Pearl Street                 | State Limit    | When Roads are Posted   |
| 4   | CB 12    | Pearl Street                 | 24,000         | When Roads are Muddy    |
| 4   | 9        | Long Swamp Road              | 24,000         | When Roads are Muddy    |
| 5   | 1        | Union Street                 | State Limit    | None                    |
| 5   | 10       | Union Street                 | State Limit    | When Roads are Posted   |
| 5   | 5        | Union Street                 | 24,000         | When Roads are Posted   |
| 5   | 11       | Union Street / Florence Road | 24,000         | When Roads are Posted   |
| 6   | 8        | North Street                 | State Limit    | None                    |
| 6   | 7        | North Street                 | State Limit    | None                    |
| 7   | 6        | Arnold District Road         | State / 24,000 | None                    |
| 8   | 2        | McConnell Road               | 24,000         | When Roads are Posted   |
| 9   |          | High Pond Road               | 24,000         | When Roads are Posted   |
| 10  |          | Adams Road                   | 24,000         | When Roads are Muddy    |
| 11  |          | Steinberg Road               | 24,000         | When Roads are Muddy    |
| 13  |          | Hollow Road                  | 24,000         | When Roads are Muddy    |
| 15  | 17       | Wheeler Road                 | 24,000         | When Roads are Posted   |
| 15  | 23       | Wheeler Road                 | 24,000         | When Roads are Posted   |
| 16  |          | Lover's Lane                 | 24,000         | When Roads are Posted   |
| 17  |          | Richmond Road                | 24,000         | When Roads are Muddy    |
| 18  | 24       | Town Farm Road               | 24,000         | When Roads are Posted   |
| 20  | 21       | Stone Mill Dam Road          | 24,000         | When Roads are Posted   |
| 21  |          | Newton Road                  | 24,000         | When Roads are Posted   |
| 22  | 22       | Churchill Road               | 24,000         | See Bridge Restrictions |
| 23  |          | Fay Road                     | 24,000         | When Roads are Muddy    |
| 24  |          | Wagner Road                  | 24,000         | When Roads are Posted   |
| 25  |          | Furnace Road                 | 24,000         | None                    |
| 26  |          | Middle Road                  | 24,000         | None                    |
| 27  |          | Paint Works Road             | 24,000         | When Roads are Posted   |
| 28  |          | Frog Hollow Road             | 24,000         | When Roads are Muddy    |
| 29  |          | Basin Road                   | 24,000         | When Roads are Posted   |
| 30  |          | Van Cortland Road            | 24,000         | When Roads are Posted   |
| 31  |          | Country Club Road            | 24,000         | When Roads are Posted   |
| 32  |          | Chapel Hill Road             | 24,000         | When Roads are Muddy    |
| 33  |          | Park Street (portion)        | 24,000         | When Roads are Posted   |
| 34  |          | Smalley Road                 | 24,000         | When Roads are Posted   |
| 35  |          | Wood Lane                    | 24,000         | When Roads are Posted   |

(continued) Figure 29: Highway Weight Restrictions

| TH# | Bridge # | Road Name                      | Limit* (lbs) | Restrictions                  |
|-----|----------|--------------------------------|--------------|-------------------------------|
| 36  |          | Birch Hill Road                | 24,000       | When Roads are Posted         |
| 37  | 29       | N Birch Hill Road              | 24,000       | When Roads are Posted         |
| 38  |          | Corona Street                  | 24,000       | None                          |
| 39  |          | Marshall-Philips Road          | 24,000       | When Roads are Posted         |
| 39  |          | Hack's Sawmill Toad            | 24,000       | When Roads are Posted         |
| 40  |          | Short Swamp Road               | 24,000       | When Roads are Muddy          |
| 42  | 14       | Carver Street                  | 24,000       | None                          |
| 42  | 25       | Carver Street                  | 24,000       | When Roads are Muddy          |
| 43  |          | Nickerson Road (portion)       | 24,000       | None                          |
| 44  | 28       | Old Brandon Road               | 24,000       | When Roads are Muddy          |
| 45  |          | Kimball Road                   | 24,000       | When Roads are Muddy          |
| 47  |          | Prospect Street                | 24,000       | <i>No Trucks Over 2 Axels</i> |
| 49  |          | Schoolhouse Road               | 24,000       | None                          |
| 52  |          | Mill Lane                      | 24,000       | None                          |
| 53  |          | Ray Forest Road                | 24,000       | When Roads are Muddy          |
| 54  |          | Briggs Lane                    | 24,000       | None                          |
| 55  |          | Kennedy Road                   | 24,000       | When Roads are Muddy          |
| 58  |          | Nickerson Road (portion)       | 24,000       | None                          |
| 59  |          | Old Farm Road                  | 24,000       | When Roads are Muddy          |
| 60  |          | N Railroad Avenue              | 24,000       | None                          |
| 61  |          | Cedar Street / Walnut Street   | 24,000       | None                          |
| 62  |          | High Street                    | 24,000       | <i>No Thru Trucks</i>         |
| 63  |          | Highland Avenue / Dyer Street  | 24,000       | None                          |
| 64  |          | Case Street                    | 24,000       | None                          |
| 65  |          | N Seminary Street              | 24,000       | None                          |
| 66  |          | W Seminary Street              | 24,000       | None                          |
| 67  |          | E Seminary Street              | 24,000       | None                          |
| 68  |          | E Prospect Street              | 24,000       | None                          |
| 69  |          | River Street                   | 24,000       | None                          |
| 70  |          | Rossiter Street                | 24,000       | None                          |
| 71  |          | Church Street (portion)        | 24,000       | None                          |
| 72  |          | Goldspink Avenue               | 24,000       | When Roads are Muddy          |
| 73  |          | Church Street (portion)        | 24,000       | None                          |
| 74  |          | Railroad Avenue                | 24,000       | None                          |
| 75  |          | N Railroad Avenue              | 24,000       | None                          |
| 76  |          | Russell Lane                   | 24,000       | None                          |
| 77  |          | Barlow Avenue                  | 24,000       | When Roads are Muddy          |
| 78  |          | Maple Street                   | 24,000       | None                          |
| 79  |          | Stephen Douglas Road           | 24,000       | None                          |
| 80  |          | Mt. Pleasant Drive             | 24,000       | When Roads are Muddy          |
| 81  |          | N Conant Drive / Ormsbee Drive | 24,000       | When Roads are Muddy          |
| 82  |          | Deer Run Road                  | 24,000       | When Roads are Muddy          |
| 84  |          | Fox Road                       | 24,000       | When Roads are Muddy          |
| 85  |          | Sunset Drive                   | 24,000       | When Roads are Muddy          |

Source: Town of Brandon March 2008

\* State Limit is 55,000 pounds

### HAL defined

The Highway Research Section of the Agency of Transportation maintains information on High Accident Locations (HALs). A HAL is defined as a location on the federal-aid highway system that has experienced a minimum of five accidents over a five-year period and that has an Actual Rate to Critical Rate Ratio (ARCR) of 1 or greater for an intersection and 2 or greater for a section. Sections are taken as 0.3-mile highway segments. Highway Research tabulates HALs yearly in descending order of ARCR ratios for both intersections and sections. The locations with the highest ARCR ratios are those characterized with higher accident rates than the average of those on similar facilities.

The State of Vermont Agency of Transportation periodically examines sections of highways and intersections to determine their accident rates. Those areas in which the actual accident rate exceeds the critical rate are considered high accident locations (HALs) and listed in a statewide HAL report.

| Rank*        | Route #      | Mileage     | ADT   | Years | # of Accidents | # of Fatalities | # of Injuries | Severity Index |
|--------------|--------------|-------------|-------|-------|----------------|-----------------|---------------|----------------|
| 390          | US 7         | 2.804-3.104 | 7800  | 5     | 9              | 0               | 4             | \$26,600       |
| 93           | US 7         | 3.904-4.204 | 11027 | 5     | 19             | 0               | 9             | \$27,163       |
| 437          | VT 73        | 2.820-3.120 | 2538  | 5     | 5              | 0               | 0             | \$8,200        |
| 427          | VT 73        | 4.020-4.320 | 2500  | 5     | 5              | 0               | 5             | \$50,420       |
| Intersection | US 7 & VT 73 | 3.780-3.840 | 9090  | 5     | 12             | 0               | 0             | \$8,200        |

\* Ranking corresponds to the statewide rank by Actual/Critical ratio  
Source: Vermont Agency of Transportation High Crash Location Report: Sections and Intersections, 2001-2005.

The primary causes of accidents in the urban core are believed to be lane confusion at intersections and uncontrolled access from side streets and driveways into routes with heavy traffic (rear end collisions, for example, typically occur at poorly signed and/or poorly signalized intersections). Outside the core, it is believed that higher accident frequencies generally correspond to excessive travel speeds on road segments with geometric deficiencies, the presence of congestion and higher traffic volumes, as well as low sufficiency ratings.

### Access Management

Arterials and highways in the urban fringe commonly experience deterioration in their ability to accommodate traffic in a safe and efficient manner as travel demand increases. This problem results from the requirement that the facility must serve the conflicting functions of providing for land access and vehicular movement. Observations of many engineers and planners conclude that when conventional highways are constructed on

new rights-of-way, initially there are few commercial driveways and the safety record is good. As the highways get older the traffic volume builds up, roadside businesses develop, more and more commercial driveways are cut, and the accident rate gradually increases.

The Vermont Agency of Transportation (VTrans) uses the process of access management to manage access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed. The process of access management is a cooperative effort on the part of the local zoning and planning agencies and VTrans.

Access management balances mobility and access. As communities grow, it is sometimes difficult to get the most value from each parcel of land as it is "landlocked". The value of the landlocked property is usually much lower than property with direct access to a public road or street. On the other hand, parcels with driveways too close to an intersection are not easily accessed if traffic frequently backs up and blocks the entrance. Clearly, the property has a much higher value if its driveway locations are well planned and designed. So the goal of access management is to achieve a safe and efficient flow of traffic along a roadway while preserving reasonable access to abutting properties. Achieving this goal requires a careful balancing act in the application of access design standards and regulations.

The need for better access management is most obvious in strip commercial areas where driveways are found every two feet. Too many driveways can confuse drivers, who become uncertain as to when turns into and out of driveways will be made.

Their existence results in a large number of turning movements and conflict points, increasing the potential for traffic accidents. In addition, where there are no turn lanes, each turning vehicle slows traffic and reduces the carrying capacity of the road. Unfortunately, once an access management problem is obvious, it is often too late to correct. By managing access to the highway system during project planning stages, safe access can be provided while preserving traffic flow.

Access management can benefit properties in all communities and along all types of roads. Its principles have been a part of roadway design for many years. For example, freeways function to move large volumes of traffic at high speeds for long distances because access is limited. In contrast, residential streets function primarily to provide access to homes.

The key to effective access management is linking appropriate access design to roadway function. Successful access management protects and enhances property values while preserving the public investment in our roads.

The primary design techniques used in access management focus on the control and regulation of the spacing and design of the following:

- Driveways and streets

- Medians and median openings
- Traffic signals
- Freeway interchanges

### **Benefits of Access Management**

Transportation officials and planners are showing more interest in access management because of increasing traffic congestion, traffic safety issues, and the rising costs of road improvements. Good access management can accomplish the following:

Reduce crashes and crash potential  
 Preserve roadway capacity and the useful life of roads  
 Decrease travel time and congestion  
 Improve access to properties  
 Coordinate land use and transportation decisions  
 Maintain travel efficiency and related economic prosperity

### **Basic Principles of Access Management**

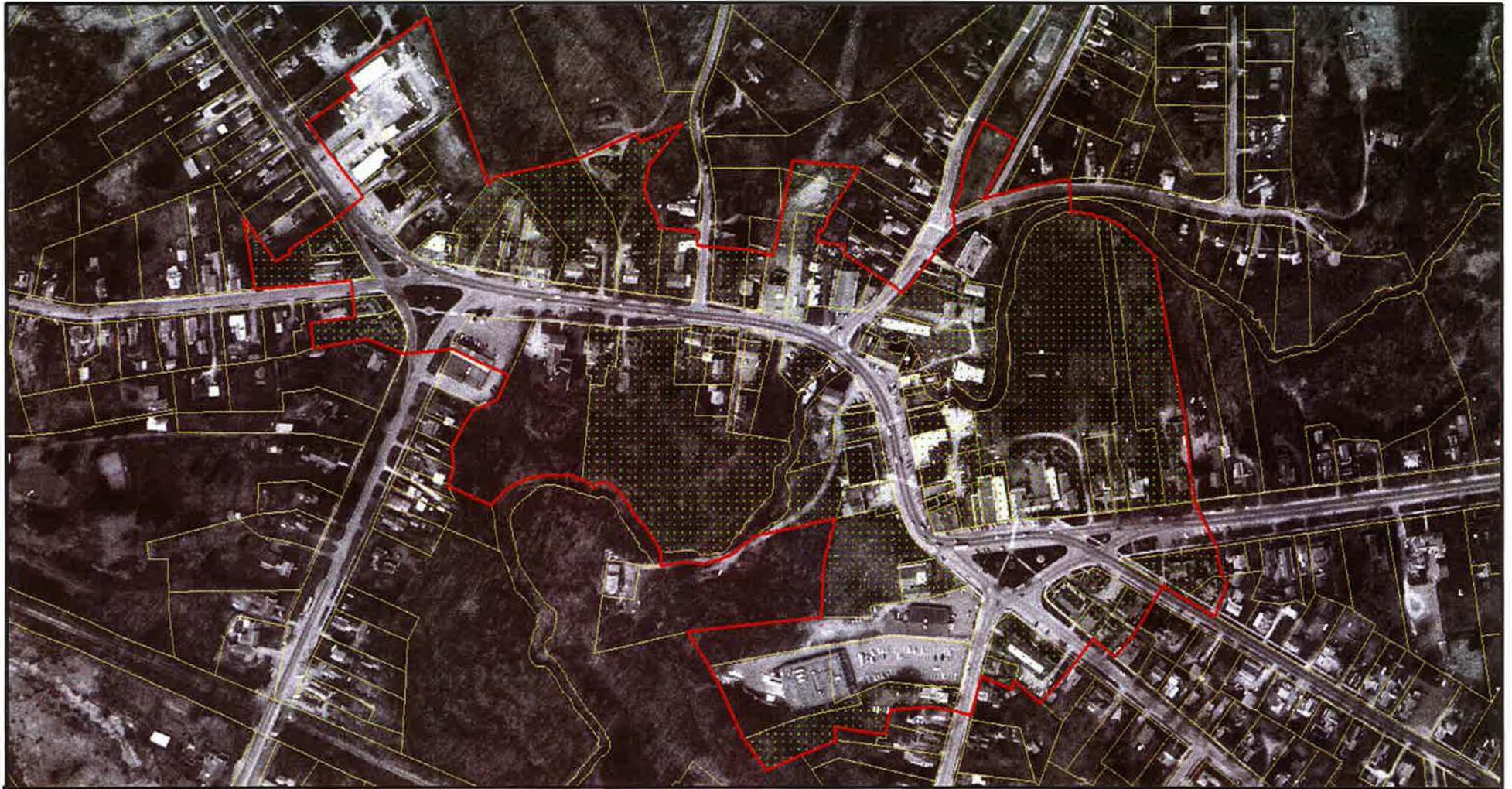
Six basic principles are observed in achieving the benefits of access management:

- Limit the number of conflict points
- Separate the conflict points
- Separate the turning volumes from through movements
- Locate traffic signals to facilitate traffic movement
- Maintain a hierarchy of roadways to function
- Limit direct access on higher-speed roads

### **Consequences of Not Managing Access**

- The efficiency of our transportation system will deteriorate, and traffic and land use conflicts will also increase
- Poorly planned strip commercial development will be encouraged
- The number of private driveways will proliferate
- The existence of more driveways mean more traffic conflicts, crashes, and congestion
- The public's investment in Vermont's roadways will be diminished
- Roads will have to be widened at great public expense to make up for capacity lost to inefficient traffic operations
- The incompatibility of providing land service and traffic service will become more severe
- Neighborhood streets will be used to bypass congested intersections

The best access management programs are launched before problems develop, thereby reducing traffic crashes and preserving existing road capacity.

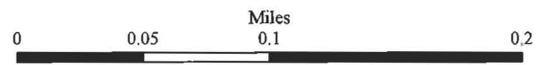


## BRANDON DOWNTOWN DESIGNATION PROPOSED DISTRICT

-  Property Lines
-  Downtown District
-  Historic District

ORTHOPHOTO: Vermont Mapping Program 1994.

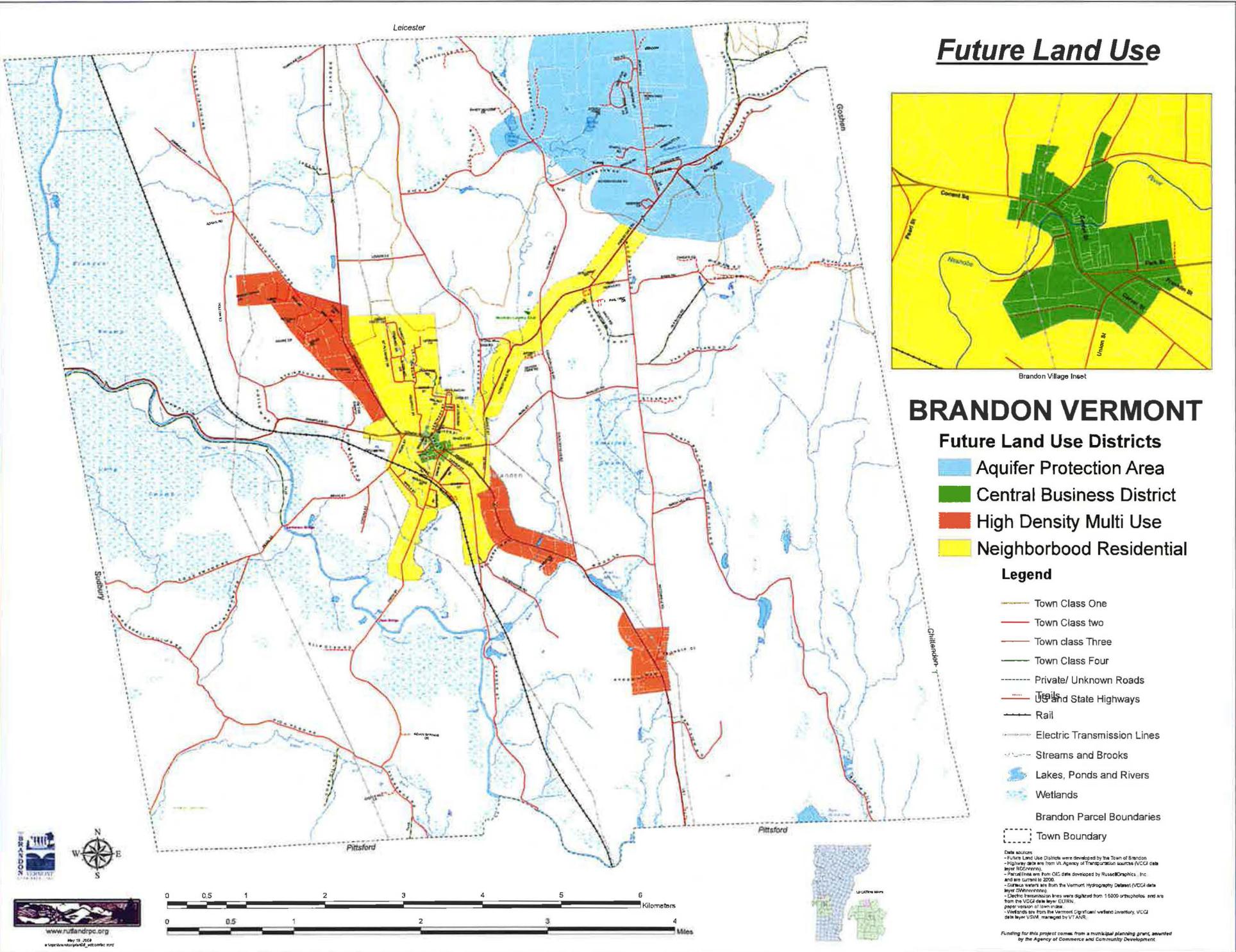
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February 2003







# Future Land Use



Brandon Village Inset

## BRANDON VERMONT

### Future Land Use Districts

- Aquifer Protection Area
- Central Business District
- High Density Multi Use
- Neighborhood Residential

### Legend

- Town Class One
- Town Class two
- Town class Three
- Town Class Four
- Private/ Unknown Roads
- US and State Highways
- Rail
- Electric Transmission Lines
- Streams and Brooks
- Lakes, Ponds and Rivers
- Wetlands
- Brandon Parcel Boundaries
- Town Boundary

**Data sources:**  
 - Future Land Use Districts were developed by the Town of Brandon  
 - Highway data are from VT Agency of Transportation sources (VCCG data base 8/2009)  
 - Parcel lines are from GIS data developed by RusselGraphics, Inc. and are current to 2009.  
 - Contour lines are from the Vermont Hydrography Dataset (VCCG data base 6/2009)  
 - Electric transmission lines were digitized from 1:5000 orthophotos and are from the VCCG data base 8/2009.  
 - Wetlands are from the Vermont Significant Wetland Inventory, VCCG data base 1/2009, managed by VTAR.

Funding for this project comes from a municipal planning grant awarded by the Agency of Commerce and Community Development.

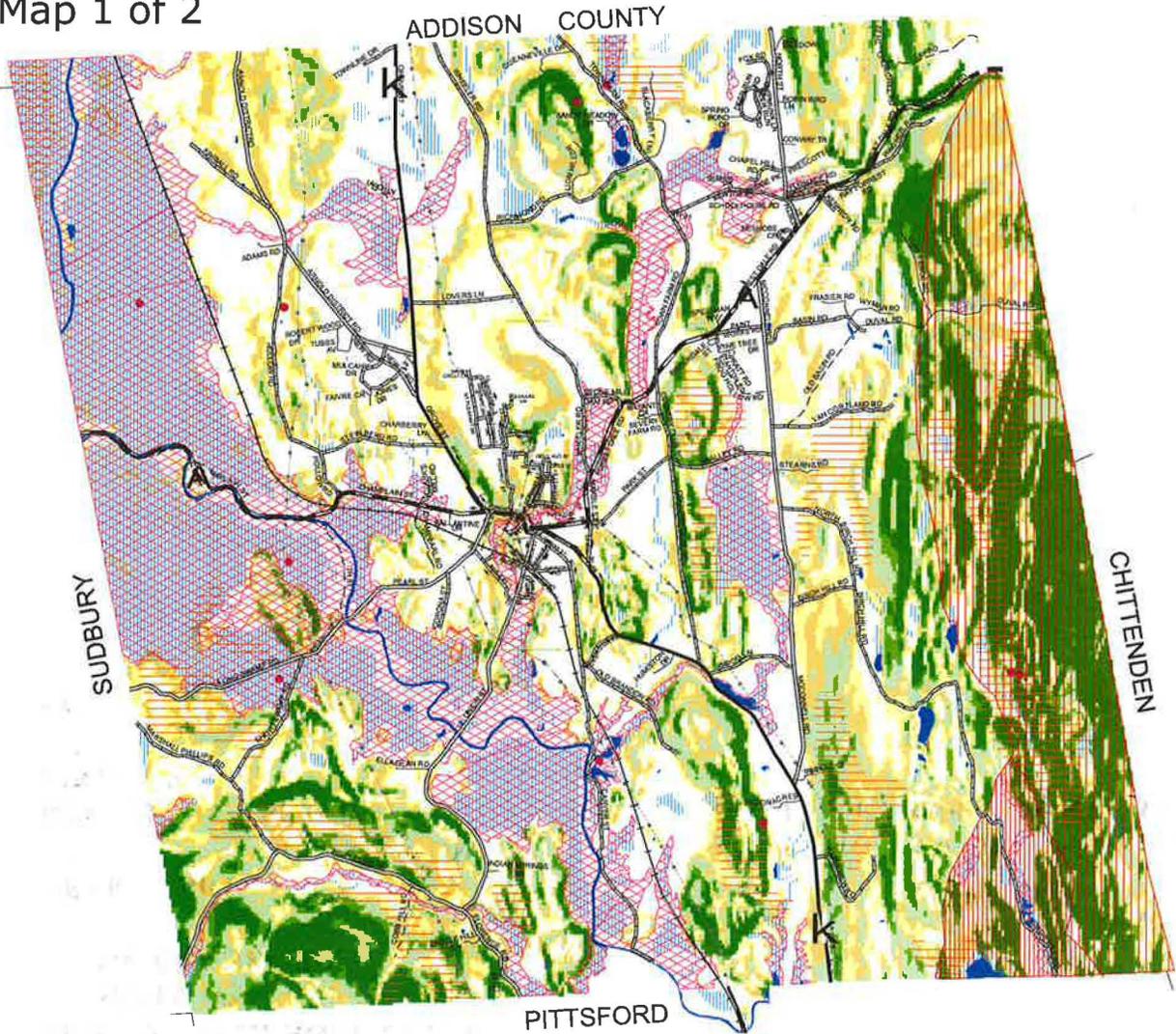


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 May 12, 2010  
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# Natural Resources

## Brandon

Map 1 of 2



Location Map



Map intended for planning purposes only.  
For more information, please contact:  
Rutland Regional Planning Commission  
PO Box 965, The Opera House, Third Floor  
Rutland, VT. 05702

- |                       |                          |                         |
|-----------------------|--------------------------|-------------------------|
| — US Highway          | —+— Railroad             | Bear Production Habitat |
| — State Highway       | —•— Electric Line        | Seasonal Bear Habitat   |
| — Class 2 Town Road   | —~— Rivers & Streams     | Slopes 6 - 10 %         |
| — Class 3 Town Road   | Lakes & Streams          | Slopes 10 - 14 %        |
| --- Class 4 Town Road | — Deer Wintering Areas   | Slopes 14 - 20 %        |
| — State Forest Road   | Flood Hazard Areas       | Slopes 20 - 24 %        |
| — Private Road        | • Rare Plant/Animal Site | Slopes Above 24 %       |
| --- Other Road        | Wetland                  |                         |

POLITICAL BOUNDARIES: 1:24,000 USGS Quadrangles, VCGI, 1991.

ROADS: VT Enhanced 911 project 1996 -1998.

SURFACE WATER: Interpreted from 1:5,000 orthophotos using USGS 7 1/2' quadrangles and 1:20,000 color infrared aerial photography as additional source material.

NWI WETLANDS: USFWS NWI used 1:80000 color infrared aerial photos (flown between 1975 and 1978), USGS topo sheets and other mapped and text data to interpret locations of wetlands. 3 acre mapping unit. Two-thirds of the wetlands were hand digitized from 1:24000 mylars. The remainder was scanned from 1:24000 or 1:25000 mylars. These mylars were created by transferring wetland polygon boundaries from 1:25000 NWI mylars to 1:24000 basemaps. Wetlands for planning purposes only. Refer to the VANR-DEC, Water Quality Division, Wetlands Section for official wetlandsdeterminations. (802) 241-3770.

FLOOD PLAIN: Digitized from FEMA Flood Insurance Rate Maps. Floodplains for planning purposes only. Refer to the VANR-DEC, Water Quality Division, Floodplain coordinator for official floodplain determinations. (802) 241-3759.

DEER WINTERING AREAS: 1:24000 AND 1:25000, VANR, 1994.

BLACK BEAR HABITAT: Vermont Fish and Wildlife Department, "Black Bear Habitat in Vermont, 1989"

RARE PLANT/ANIMAL SITES: Rare, Threatened and Endangered Species & Significant Communities, 1:24000, Vermont Nongame and Natural Heritage Program, VANR, 1997.

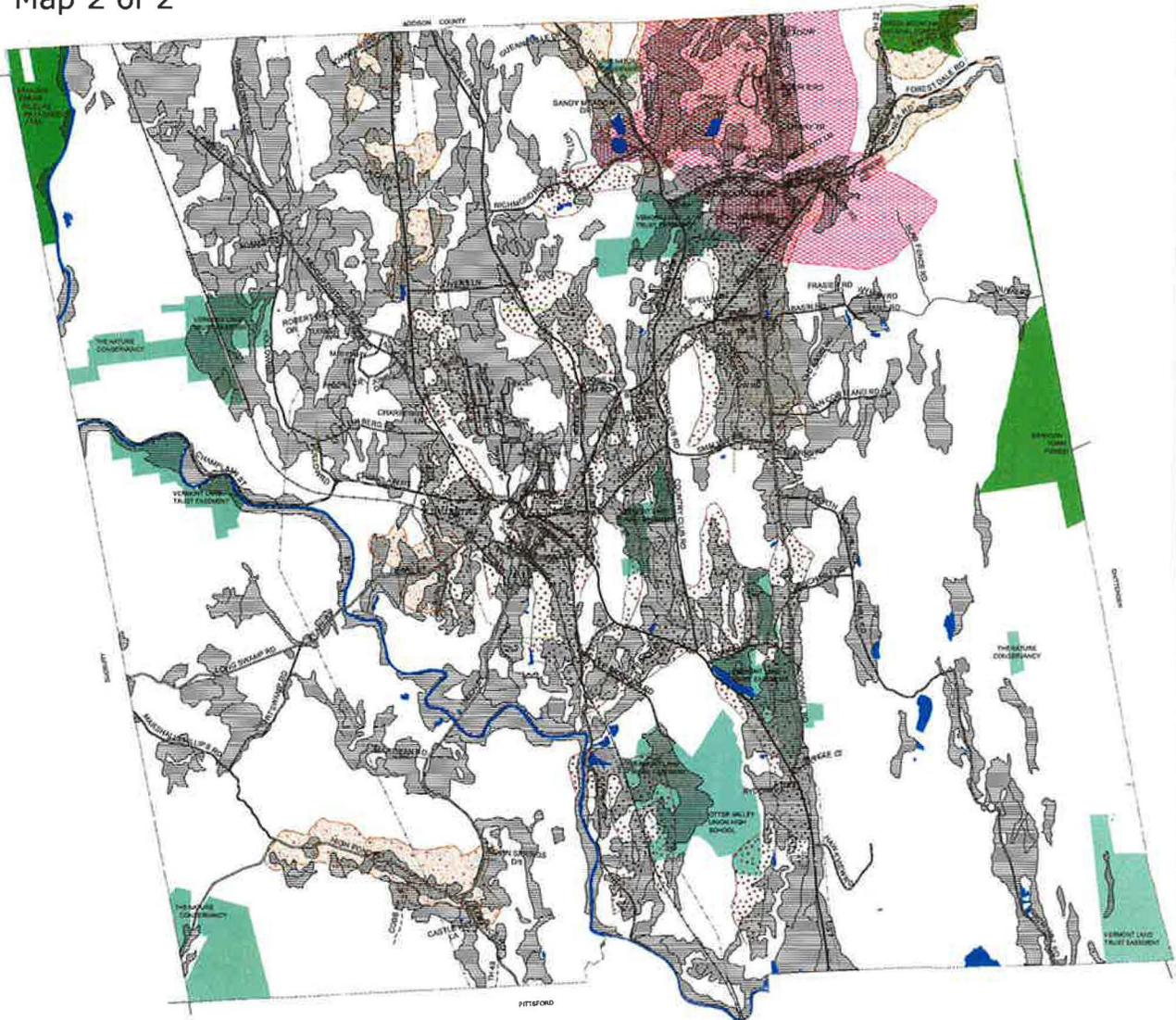
SLOPE: Generated from 7.5 minute DEMs. Slope was calculated for 30 by 30 meter pixel, 1998.



# Natural Resources

## Brandon

Map 2 of 2



- |                     |                    |                                  |
|---------------------|--------------------|----------------------------------|
| — US Highway        | — Private Road     | Agricultural Soils               |
| — State Highway     | — Other Road       | Potential Sand Deposits          |
| — Class 2 Town Road | — Railroad         | Potential Sand & Gravel Deposits |
| — Class 3 Town Road | — Electric Lines   | Conserved Lands                  |
| — Class 4 Town Road | — Rivers & Streams | Private Lands                    |
| — State Forest Road | Lakes & Ponds      | Well-Head Protection Area        |



Map intended for planning purposes only. For more information, please contact:  
 Rutland Regional Planning Commission  
 PO Box 965, The Opera House, Third Floor  
 Rutland, VT 05702

POLITICAL BOUNDARIES: 1:24000 USGS Quadrangles, VCGI, 1991.

ROADS & Rail: VT Center for Geographic Information.

Electric Lines: VT Electric Power Co.

SURFACE WATER: Data is from the Vermont Center for Geographic Information, Inc, Vermont Hydrography Data set. The VHD data Hydrography Data set.

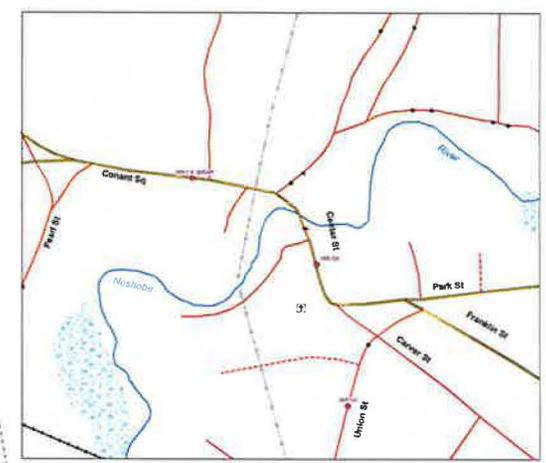
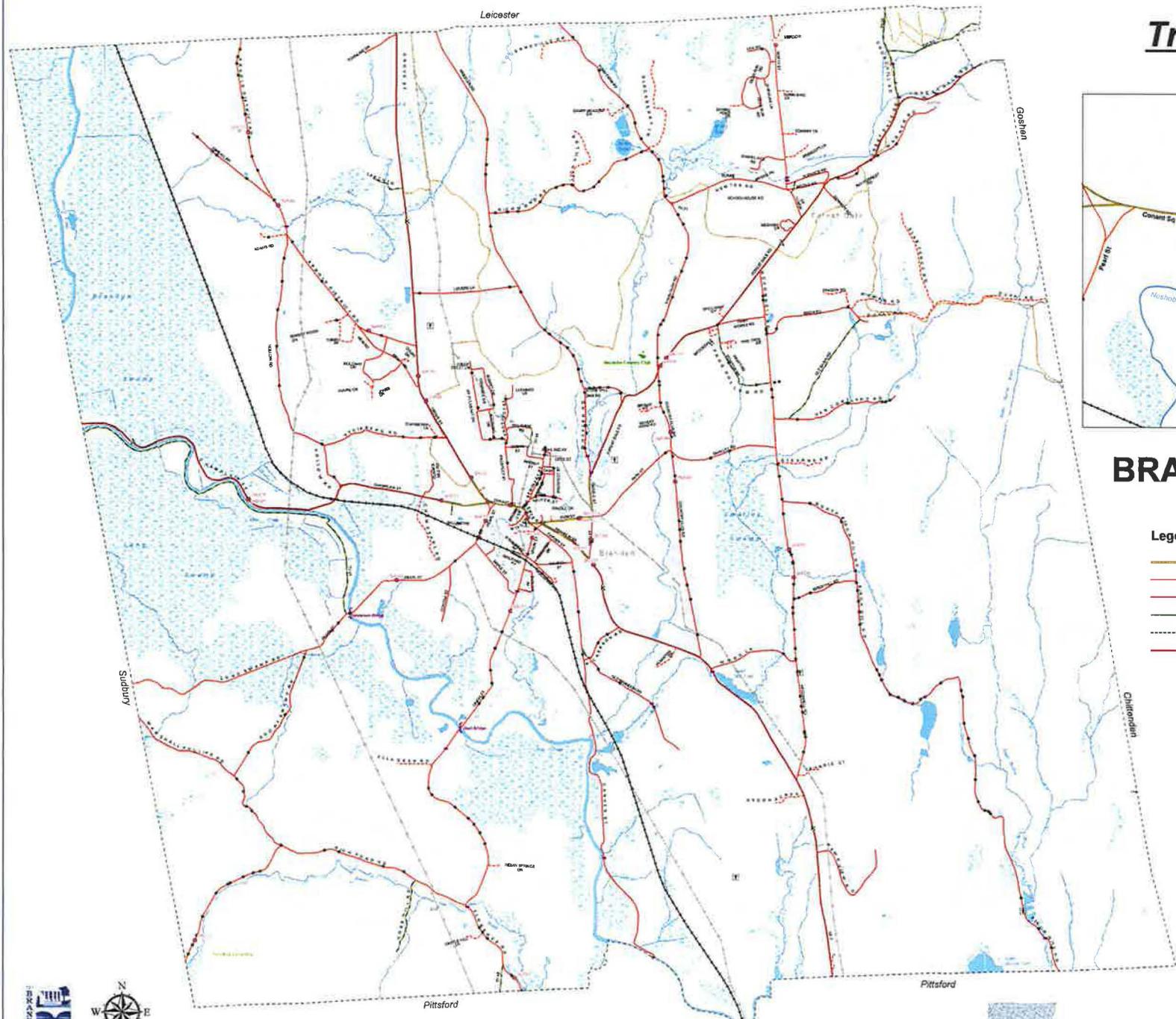
AGRICULTURAL SOILS: Prime, statewide and local are VT primary agricultural soils for Town and Act 250 planning.

SAND AND GRAVEL: The classifications of sand and gravel resources are based on information developed by USDA Natural Resource are accurate to a resolution of three acres, unmapped "inclusions" up to three acres may exist in some areas. This information is the evaluation of individual sites. Soils shown are based on national USDA-WRCS criteria and have good potential for sand and gravel.

PUBLIC/CONSERVED LANDS: Vermont Conserved Lands Database 1:5000 parcel data, UVM-SNR-SAL, 1999.

WELLHEAD PROTECTION AREAS: SPA's for groundwater sources (wells, springs), 1:24,000 USGS QUADRANGLES, VANR-DEC- Water Department of Health, 1996.

# Transportation

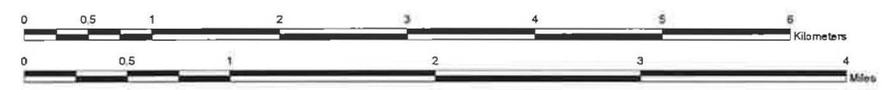


## BRANDON VERMONT

### Legend

- Town Class One
- Town Class Two
- Town Class Three
- Town Class Four
- - - Private/Unknown Roads
- US and State Highways
- Trails
- Rail
- Electric Transmission Lines
- Streams and Brooks
- Lakes, Ponds and Rivers
- Wetlands
- Brandon Parcel Boundaries
- Town Boundary
- Schools
- ☠ Cemeteries
- Bridges
- Covered Bridges
- Culverts
- Automatic Traffic Recorders

www.tulandpc.org  
May 18, 2007  
www.brandontownvt.org



**Data Sources**

- Highway data is from VT Agency of Transportation sources (VCGI data layer RDS/road)
- ATIS data is from VTRANS automatic traffic inventory, 2005
- Parcel data is from GIS data developed by Data Management, Inc. and is current to 2005
- Surface water is from the Vermont Hydrography Dataset (VCGI data layer B/whannemo)
- Electric transmission lines were digitized from 1:5000 orthophoto and are from the VCGI data layer E/ETRN
- Bridge and culvert data was collected by RWPC and Helen Associates, 2002, and is from the VCGI data layer TRANSTRUCTURE is current to 2007
- Cemetery data is from the VCGI data layer C/CEMETERY created by VTTRANS, 2007. Updated and revised data by RWPC, 2008
- Wetlands are from the Vermont Significant Wetland Inventory, VCGI data layer W/VI, managed by VTANS

Funding for this project comes from a municipal planning grant awarded by the Agency of Commerce and Community Development.