# Town & Village of Enosburgh, Vermont Comprehensive Municipal Plan 2020



Prepared by the Enosburgh Planning Commission

Adopted by the Town Selectboard on April 20, 2020

## Acknowledgements

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The following visions serve as a guideline for the future of Enosburgh. These visions are reflective of the input received by the Planning Commission in the surveys and public meetings.

- The preservation of the character of Enosburgh and the protection of our natural resources will remain foremost in the plan for the growth of the Community.
- The rural character of Enosburgh is defined by its focus on agriculture, forest resources, and scenic vistas.
- A commitment to our children, families, land, water, and natural beauty will continue to make our community a special and unique place to the year-round residents as well as to our tourists and visitors.
- The provision of varied recreational opportunities is vital in promoting the community's quality of life.
- Community character will be a factor in the businesses that look towards Enosburgh as not only a good location for their business, but also as a place that offers a good way of life for their employees.
- Encouraging environmentally sound, clean businesses, new technology, home-based businesses, and enhancement of our tourist trade will lead to a more stable tax base and help in reducing dependence on residential property taxes.
- Encouraging diverse agricultural practices will help maintain the rural landscape of the community and help the local economy.
- Our young people should have employment opportunities and the ability to live near their families which can strengthen the family unit.
- New development in Enosburgh should occur at a rate which does not exceed Enosburgh's ability to accommodate population growth and the ability to provide essential services. The majority of new housing and commercial development is encouraged in the Village of Enosburg Falls.

### Why plan?

The primary purpose of any plan is to be a guide for the achievement of goals. In our personal lives this could entail financial planning, retirement planning, or planning for next months' vacation. In principle, town plans are no different. In very basic terms, a town plan is a community statement describing where you came from, where you are now, and where you want to go in the future.

Land use, the focus of town planning, impacts the world in a myriad of ways. Each development has cultural, environmental, and economic costs and benefits that need to be weighed by the community. Is there enough space available in the elementary school to accommodate the additional children from more residential development? How can we conserve our best agricultural lands without unnecessarily taking away peoples' property rights? These are the kinds of questions that can be addressed in town plans.

Vermont municipalities are not required to plan, but most do – to protect community interest, to retain local control, to promote desired forms of growth and development, to

### What is a Municipal Plan?

The Municipal Plan evaluates data and trends relating to growth and development, village character. the provision of facilities and services, and compatibility with adjacent municipalities and the region, identifies goals and policies to guide community decision making, and sets forth an implementation program.

target public investment, to protect scarce public resources, and build and sustain a sense of community.

### How are municipal plans used?

There is a range of ways in which a town plan can be used, from simply a source of information to a foundation for regulations. The community itself determines what is important and how it will be used.

At the most basic level the document can be used to catalogue what is known about the municipality. This collection of information could serve to familiarize residents, potential residents, and development interests about Enosburgh and its resources. Good information is essential to wise decision making whether for municipal planning or investing in a home, farm, or business.

The plan may also be used to evaluate development proposals for conformance with the Enosburgh's goals and policies. Determination of a specific project's conformance, or otherwise, with the municipal plan is one method of participating in the Act 250 process.

Municipalities that have adopted plans are eligible for certain State planning grants. In most cases, planning grants require a municipal plan to be adopted. This money can be used to update zoning bylaws, conduct feasibility studies for projects, or purchase development rights of a parcel of land.

Beyond this purpose, the Enosburgh Municipal Plan serves as the legal basis for land use regulations and capital budget programs, which the municipalities may wish to adopt. Municipal plans, in general, state community goals and chart the course while zoning or capital budgets are the vehicles to get there.

The Enosburgh Municipal Plan was developed with the following purpose in mind: to guide municipal officials, residents, and persons contemplating actions involving land use on matters of land development, the economic provision for facilities and services, resource use and conservation, and public health, safety, and welfare.

### What is required in a plan?

Under current law, a municipality must address twelve (12) elements in their plans, which are the following:

- A statement of objectives, policies, and programs of the municipality to guide the future growth and development of land, public services and facilities, and to protect the environment;
- A land use plan;
- A transportation plan;
- A utility and facility plan;
- A statement of policies on the preservation of rare and irreplaceable natural areas, wildlife habitat and habitat connectors, and scenic and historic features and resources;
- An educational plan;
- A recommended program for the implementation of the objectives of the development plan;
- A statement indicating how the plan relates to development trends and plans for adjacent municipalities, areas and the region developed under this title;
- An energy plan;
- A housing element that shall include a recommended program for addressing low and moderate income person's housing needs;
- An economic development element that describes present economic conditions and identifies policies, projects, and programs necessary to foster economic growth; and
- A flood resiliency plan.

These represent minimum requirements required by Title 24 Chapter 117 (the Vermont Municipal and Regional Planning and Development Act).

### How does the planning process work?

A municipal plan is arrived at by: identifying community issues and needs; collecting and analyzing background information about the community; and combining them into a vision (statement) of how the community should develop. Goals, policies, and actions or recommendations are formulated to address specific elements such as land use, housing, or education.

The need for involvement of residents in the planning process cannot be overstated. While it is the responsibility of the Planning Commission to develop the plan, citizens and citizen committees can have an active role in gathering information and formulating plan policies for guiding development. A better plan will be the result of a group effort. Without the participation of residents, the balancing of needs, values, and resources can be difficult to achieve.

Finally, planning is a continuous process, and plans can be amended to meet new challenges or situations. The Plan must be updated every five years or it expires. This provides opportunity for citizen involvement, and it acts as a review of the effectiveness of the Plan and its policies.

### Jurisdiction.

Enosburgh —as it is referred to within this plan and as it exists in the minds of residents—is a single, unified community that includes both a chartered Town and incorporated Village. For political purposes, both the Town of Enosburgh and Village of Enosburg Falls are independent, sovereign municipalities under state statute. The Town is governed by a five-member Board of Selectmen; the Village is governed by a five-member Board of Trustees. Each board has the authority to execute administrative, legislative and quasi-judicial functions within its respective municipal boundaries. Historically, across the state and region, many incorporated villages were established for the purposes of creating municipal water and light districts. It was to this end that the Village of Enosburg Falls was incorporated in 1888, more than 100 years after the Town was chartered in 1780.

While the Town and Village remain separate political entities, they share many public services and governing functions and are working towards the same goals with respect to economic development, residential growth, energy conservation, environmental protection and farmland conservation. This is the basis for the creating a **unified plan** developed by a **joint**, **municipally-appointed Planning Commission**. The Enosburgh Planning Commission is delegated this responsibility jointly by the Town Selectboard and Village Trustees to plan for all of Enosburgh. Members of the Planning Commission include residents of the village and town. Ultimately, residents of the town frequent businesses and public facilities within the village, while residents of the village likewise enjoy the scenic character and rural amenities available throughout town. Citizens do not identify as a resident of one municipality over the other, but rather as residents of Enosburgh—singularly.

In the past, the local planning process involved maintaining separate municipal plans for the Town and Village. However, in recognition of the long-term vision for prosperity and sustainability shared by all Enosburgh residents, the Planning Commission, Selectboard and Village Trustees agreed to establish a single, comprehensive plan for the community. Going forward, this unified document will be updated with input from both municipalities to promote consistent, community-wide development goals for all of Enosburgh.

### Role of the Enosburgh Planning Commission.

The Planning Commission is empowered to formulate goals and objectives toward plan development. The Commission is responsible for the review and revision of the Municipal Plan and to propose amendments to the zoning bylaws and regulations in an effort to implement the plan. The role of the Commission is ongoing. Changing community conditions, preferences and priorities call for consistent monitoring of plan objectives. Amendments to the plan may, from time to time, be necessary and the Commission has responsibility for this task.

### Past Planning Efforts and Citizen Participation.

Municipal Plans are intended to be "living" documents which have been, and will continue to be, updated many times to reflect the ever-changing conditions in Enosburgh. The 2020 Enosburgh Municipal Plan builds on the previous plans and furthers the effort to maintain a strong, vibrant community.

Enosburgh has led many efforts to gain citizen participation and input to inform current and prior municipal plans. The Village conducted community surveys in 2002 and 2007 and the Town conducted a survey during the 2001 plan development; these efforts were aimed at gathering input to provide guidance on specific planning issues. In 2003, the Vermont Council on Rural Development sponsored an Enosburg Community Visit, which was an expansive opportunity for a community wide discussion on overcoming challenges and achieving community goals. Many of the priority challenges and opportunities are still relevant today although significant progress has been made.

The 2014 Enosburgh Plan is a result of a planning process initiated in the summer of 2013. This planning process began with the formation of a Town and Village joint Planning Commission. The Planning Commission reviewed the similarities and differences between the two municipal plans and developed a combined draft plan to address them. A survey was conducted in March 2014 and more than 70 Enosburgh residents responded to the survey and provided the planning commission with valuable input on their goals and visions for the community. Residents were invited to participate in regular joint planning commission meetings and at the April 2014 meeting to review the survey results; Front Porch Forum is used to keep residents informed of the status of plan.

The 2019 Enosburgh Plan is an update to the 2014 Enosburgh Plan that includes adding current data, updates to comply with Vermont statutory changes, including an enhanced energy chapter, editing policies and implementation strategies based on progress and new information and incorporating the Vital Village master planning effort. The 2019 Vital Village master plan involved a robust community engagement program related to village revitalization, physical streetscape improvements, access to the Missisquoi Valley Rail Trail and economic development.

### The Structure of the Enosburgh Municipal Plan.

The Enosburgh Municipal Plan is divided into 14 chapters that address both the required elements Act 200 and other key areas of concern. Each subject is then addressed in detail including past conditions, current status, and future needs.

Based on the findings in the discussion, one or more goals are then developed for the subject. **Goals** can be defined as "the desired future condition" although some may not be attainable for many years. For example, the goal for education is "to provide high quality, broad-based educational services for the people of the community."

**Policies** are those features that describe how to attain our goals, are a guide for homeowners and developers, and a means for the Planning Commission to evaluate projects. For example, "ensure that rapid development will not inflict undue impacts and hardships upon the ability of the municipality to provide adequate educational services."

The following action to then implement the goals and policies are the **Recommendations;** these statements extend beyond that of the Planning Commission to incorporate the communication and cooperation of municipal staff, partner organizations (schools, economic development groups) and residents to achieve the outcome. For example, "Consider applying for grant funds, such as the Community Development Block Grant, for renovation or rehabilitation of buildings for housing or economic development."

### Authority.

Vermont municipalities are authorized to prepare and adopt a Municipal Plan via Chapter 117, Title 24 of the VSA (Vermont Municipal and Regional Planning and Development Act). Section 4382 of the Act dictates what needs to be included in a plan. The intent of the law is to encourage a municipality to "engage in a continuing planning process that will further several stated goals." The Act further states that municipal plans shall be re-examined, updated, and re-adopted every five years. This process should be ongoing, whereby the Plan is continually reassessed and revised to meet the changing needs of the community. Consequently, there will be future opportunities to review and amend the Plan. Residents, community groups, and anyone with an interest are encouraged to provide input into this ever-continuing process to the Enosburgh Planning Commission.

### Goals, Policies and Recommendations.

### GOALS

To create a document that represents the collective vision of the Enosburgh community for the future.

### POLICIES

- Encourage citizen involvement at all levels of the planning process.
- Ensure that decisions having local impacts are made at the most local level possible and with local input.
- Continue to represent and advocate local interests, as time and resources permit, through participation in regional, state, and federal planning, legislative efforts, and/or regulatory proceedings that may affect Enosburgh and the interest of its residents.
- Participate as a statutory party in state Act 250 proceedings as appropriate.

The Town of Enosburgh is located in the northwestern part of the State of Vermont in Franklin County and is bordered by seven towns: Montgomery to the east; Richford to the northeast; Berkshire to the north; Franklin to the northwest; Sheldon to the west; Fairfield to the southwest; and Bakersfield to the south. Enosburgh covers a total of 30,925.29 acres or approximately forty-eight square miles. Enosburgh is around 20 miles to the City of St. Albans, the regional growth center, and approximately 45 miles from the City of Burlington, Vermont's largest City.

### Population.

### Past and Present Population.

In the year 1800, shortly after being settled, Enosburgh had 143 persons. Figure 2.1 shows how the population for Enosburgh has changed since that year. The Town experienced its greatest population boom between 1800 and 1840 when the population climbed 2000 residents. to Between the years 1840 and 1980, the population remained steady with only slight fluctuations around 2000 persons. In 1990, the population rose above the 2500 mark for the first time (2535) and by population had 2000 the reached 2788 where it has generally remained in 2017 (2758).





Source: Vermont Indicators Online, U.S. Census Decennial and American Community Survey

Table 2.1 shows the population for Enosburgh Town, Enosburg Falls, and all of the bordering communities. Between 1960 and 2017, the population of Enosburg Falls did not add additional population, while the population of Enosburgh Town more than doubled. Between 2000 and 2017, Enosburgh experienced a population loss of 30 people despite previously gaining population between 1980 and 2000. All of the surrounding communities experienced population growth between 2000 and 2017.

Table 2.1. Population of Enosburgh and Surrounding Communities, 1960-2017							
Year	1960	1970	1980	1990	2000	2010	2017
<b>Enosburg Falls</b>	1,321	1,266	1,207	1,350	1,473	1,329	1,306
Enosburgh	645	652	863	1,185	1,315	1,452	1,452
Town							
<b>Enosburg Falls</b>	1,966	1,918	2,070	2,535	2,788	2,781	2,758
& Enosburgh							
Town							
Montgomery	876	651	681	823	992	1,201	998
Richford	2,316	2,116	2,206	2,178	2,321	2,308	2,458
Berkshire	965	931	1,116	1,190	1,388	1,692	1,711
Franklin Town	796	821	1,006	1,068	1,268	1,405	1,411
Sheldon	1,281	1,481	1,618	1,748	1,990	2,190	2,317
Fairfield	1,225	1,285	1,493	1,680	1,800	1,891	1,899
Bakersfield	664	635	852	977	1,215	1,322	1,230
Franklin	29,474	31,282	34,788	39,980	45,417	47,746	48,816
County							
Source: Vermont Indi	cators Online	, U.S. Deceni	nial Census, 2	2013-2017 Ar	nerican Com	munity Surve	у

Table 2.2 shows the percent change within each decade for Enosburgh Town, Enosburg Falls, and Franklin County from the year 1960 to the year 2010, and the percent change from 2010 to 2017. Though many residents (47.4%) live in the Village of Enosburg Falls, the majority of population growth in recent decades has occurred outside of the Village. From 1980-2017, the Village population grew 8.2%, while the population outside of the Village grew by 68.3%. There is evidence to indicate that this growth is slowing in the Town perhaps because the best development sites have now been used. The growth of the Village in the 1980's simply replaced the losses found in the previous decades.

Table 2.2. Population Change in Enosburgh, VT 1960-2017								
% Change	1960-1970	1970-1980	1980-	1990-2000	2000-2010	2010-		
			1990			2017		
<b>Enosburg Falls</b>	-4.2%	-4.7%	11.9%	9.1%	-9.8%	-1.7%		
Enosburgh Town	1.1%	32.4%	37.3%	11.0%	10.4%	0.0%		
Enosburg Falls &	-2.4%	7.9%	22.5%	10.0%	-0.3%	-0.8%		
Enosburgh Town								
Franklin County	6.1%	11.2%	14.9%	13.6%	5.1%	2.2%		
Source: Vermont Indicato	Source: Vermont Indicators Online, U.S. Census, 2013-2017 American Community Survey							

### Projected Populations.

The small size of the population base makes long-term forecasting difficult especially at the local level. The projections shown here were developed by the Vermont Agency of Commerce and Community Development based on the 2010 Census data. Figure 2.2 shows the population projections for Enosburgh and for Franklin County through the years 2020 and 2030. Two projections are shown: Scenario A and Scenario B. Scenario A is based on higher economic growth and in-migration patterns that were seen in the state from 1990 to 2000. Scenario B is based on lower economic and in-migration patterns that were seen in the state from a 2010 population of 2,781 to a 2030 population of 3,020. However, Scenario B sees the population of Enosburgh decreasing slightly from 2,781 in 2010 to 2,750 in 2030. As of 2017, Enosburgh total population has decreased to 2,758 suggesting that Scenario B, in which Enosburgh would have a total population of 2,753 by 2020 may be more likely than the growth predicted in Scenario A. New population projections will be developed based on the 2020 Census data and will provide a more updated future population projection.





Source: Vermont Agency of Commerce and Community Development

### Age Distribution.

The median age in 2017 for the residents of Enosburgh was 43.0 years, up from 36.9 years in 2000. This is similar to the State of Vermont's median age

Table 2.3. Median Age of Population 2017					
Median Age (yrs)	1980	1990	2000	2010	2017
Enosburgh	32.0	33.1	36.9	40.0	43.0
Franklin County	28.9	31.7	35.7	39.6	39.9
State of Vermont	29.4	33.0	37.7	41.5	42.8
Source: U.S. Decennia	l Census, U.	S. American	Community	Survey	

of 42.8 years and higher than Franklin County's median age of 39.9 years. Enosburgh, Franklin County, and the State of Vermont have all seen an increase in their median ages since 1980.

Figure 2.3 shows the percent of population for the different age groups for Enosburgh. Enosburgh saw a drop in its under eighteen population in 2010 and 2017. The percentage of population between the ages of eighteen and sixty-four increased slightly from 2000 to 2010, but

stayed stable from 2010 to 2017. The elderly population has increased by 3.9% since 2010; in 2017 the percent of the population 65 or older is higher in Enosburgh (19%) than Franklin County (14.5%) and the State (17.5%).

### Special Populations.

The 2013-2017 American Community Survey provides information about the number of people with various levels and types of disabilities. Enosburgh has a slightly



Source: Vermont Indicators Online, U.S. Decennial Census, 2013-2017 American Community Survey

greater percentage of people with disabilities than Franklin County, but a similar percentage of people to the state overall. As of 2008, the census categorizes disabilities into six categories: hearing, vision (blind or having serious difficulty seeing, even when wearing glasses), cognitive, ambulatory (mobility), self-care difficulty, and independent living difficulty.

Table 2.4. Percent of the Non-Institutionalized Civilian Population with a Disability in 2017						
% of Persons with a Disability	Total	Persons 5-17 Years	Persons 18-64 Years	Persons 65 Years & Over		
Enosburgh	13.2%	1.2%	10.3%	37.6%		
Franklin County	12.4%	4.9%	10.7%	33.96%		
Vermont	14.2%	7.2%	11.8%	33.1%		

### Household & Household Types.

The way the population groups itself into households affects the demand for housing, community services, and employment. Figure 2.4 shows the percentages of households in Enosburgh from 1980 - 2017. While the number of households continues to grow (Table 2.5), the distribution of household types remained very similar. Enosburgh continues to have a high percentage (just under 50%) of traditional (husband-wife) households.

Table 2.5. Change in Total Number of Households			
Year Total			
	Households		
1980	783		
1990	979		
2000	1058		
2010	1108		
2017	1,128		

### Education Level.

In 2017, 87.9% percent of Enosburgh residents were high school graduates higher or while 90.7% of Franklin residents and County 92.3% of Vermont residents overall were high school graduates or higher. The community also had а lower percentage of people with a Bachelor's degree than either the County or the State. Table 2.6 shows the percentages of residents who attained high school diplomas and levels of higher education in 2000 and 2017.

Figure 2.4. Types of Households in Enosburgh



Source: U.S. Decennial Census, 2013-2017 American Community Survey Community Survey

Table 2.6. Level of Educational Attainment							
	% with a High Scho	ool Diploma or Higher	% with a Bachelor's Degree or Higher				
	2000	2017	2000	2017			
Enosburgh	75.3	87.9%	10.5	18.3%			
Franklin	82.0	90.7%	15.3	24.7%			
County							

Table 2.6. Level of Educational Attainment							
	% with a High Scho	ool Diploma or Higher	% with a Bachelor's Degree or Higher				
	2000	2017	2000	2017			
Vermont	86.0	92.3%	27.0	36.8%			
Source: US Census 2000; American Community Survey 2013-2017							

### Income and Economy.

According to the 2013-2017 U.S. American Community Survey, most of the employees in Enosburgh worked in manufacturing and in the educational, health and social services. Prior to 2000 agriculture and forestry had previously been one of the top employment sectors in Enosburgh. As of 2017, only 6% of Enosburgh residents are employed in this industry. The percentage of persons employed by industry can also be seen in Figure 2.5.



Figure 2.5. Enosburgh Residents' Employment by Industry

In 2017, 19.2% of employed Enosburgh residents worked in Enosburgh while another 43% worked elsewhere in Franklin County. The most common destinations for work outside of

Enosburgh were St. Albans town, St. Albans City, Richford, Berkshire, Swanton and Highgate. Of all those employed in Enosburgh, 21.7% were Enosburgh residents while 53.3% were residents of other Franklin County municipalities.



Figure 2.6. Enosburgh Worker Inflow/Outflow

Source: U.S. Census OnTheMap 2017

The median household income in 2017 for Enosburgh of \$54,900 is below the median incomes for both Franklin County (\$62,214) and the State of Vermont (\$57,808) (Table 2.7). While median household income for Enosburgh did increase steadily between 1979 and 2017, both the county and the state saw greater increases. Enosburgh had a decline in the percent of the population living below the poverty line in 1999; however, in 2011 this number elevated to near the 1989 level. Since 2011, the percent of the population living below the poverty line have a greater percentage of those living below the poverty line have a greater percentage of those living below the poverty line than either Franklin County or the State of Vermont.

Table 2.7. Median Household Income and Percent of All Families with Income Below the   Poverty Level									
Median Household Income (\$)				% of all persons living below					
						1	uic pov		
	1979	1989	1999	2011	2017	1989			
Enosburgh	12,174	22,872	33,683	48,835	54,900	17.1	11.4	16.3	13.1
Franklin	14,025	28,401	41,659	55,181	62,214	10.2	9.0	10.2	8.0
County									
Vermont	14,790	29,792	40,856	53,422	57,808	9.9	9.4	11.3	11.4

Table 2.7. Median Household Income and Percent of All Families with Income Below the   Poverty Level						
	Median Household Income (\$)					% of all persons living below the poverty level
	1979	1989	1999	2011	2017	1989
Source: US Cens	sus of Popul	ation 1980-	1990, Ame	rican Comm	unity Surv	ey 2007-2011 and 2013-2017

### **Chapter 3: Historic, Archaeological, and Scenic Resources**

### Early Years.

The first Vermonters were most likely residents of the Lower Missisquoi watershed. Around 12,000 years ago, when prehistoric people first settled the area, much of the land in the region was submerged under the Lake Champlain Sea. The earliest known human settlements in the state are along the margins of what used to be the Champlain Sea. This margin is along the western side of the watershed, reaching as far east as St. Albans and the Highgate area.

Between 10,000 years ago, when the Champlain Sea receded, and 350 years ago, when European colonists displaced native populations, the residents of the region based their choice of home turf upon environmental factors. Archeological research indicates that likely sites were within 200 feet of surface water of any kind, having a gentle slope and moderate or well-drained soils. These are the areas that are most likely to contain archaeological remains of Enosburgh's early inhabitants.

### Early Settlement and Government.

The Town of Enosburgh was granted May 12, 1780 and chartered May 15 of the same year by Governor Thomas Chittenden to Major General Roger Enos. General Enos was the father of Ira Allen's wife Jerusha and he served as one of Benedict Arnold's officers in the invasion of Canada.

The first proprietors' meeting was held on September 8, 1795 at Joseph Baker's house in neighboring Bakersfield. Stephen House and Amos Fassett were granted permission to "pitch" 400 acres of land (survey, cut lumber, and build saw and grist mills) as compensation for building the Town's first mills. Construction began in 1797 and by 1800 a sawmill, gristmill, and tannery were in operation on the Tyler Branch in West Enosburgh.

Of equal importance was the arrival of the Township's first permanent residents. They are believed to have been the Balch family which spent the winter of 1796-1797 on the site of the present Fernand St. Pierre farm. Otherwise, most of the proprietors came periodically to work their land but returned to their homes south of Enosburgh for the winters. Soon, other settlers arrived and the population of the Town began to grow. Among the first permanent settlers were Amos Fassett, Stephen House, and Samuel Little. Amos Fassett is probably the only one of the first settlers to have direct descendants still living in Enosburgh. As the population grew, so did the need for government.

Until June of 1799, proprietors' meetings continued to be held in either Bakersfield or Cambridge. The first proprietors' meeting held in Enosburgh was at the home of Amos Balch. It was not until March 19, 1798 that the first town meeting occurred. That year residents met at the home of Samuel Little at the Center and several officials were chosen. The most notable local official was Dr. Eliphaz Eaton, who for years served the community as a physician and town clerk and later went on to be elected as Governor of Vermont (the highest public office attained to date by a resident of Enosburgh).

### The Vanishing Frontier.

In the early days, the forested hill regions rather than the river lowlands were thought to be the best farmland. Consequently, the Center area, Cold Hollow foothills, and the uplands of the Township's southeastern corner were the first to be settled.

As the first settlement, Enosburgh Center would remain for many years the most important of the Town's numerous villages. It had been a logical location for a first settlement because of its location on the so-called Boston Post Road. Not only was it the only road in town, it was also the direct route between Boston and Montreal. It was here that the Town's founders voted to lay out lands for a parade ground donated for public use. Local industry included a potash and pearlash works, a comb factory, a harness shop, a tailor shop, and a blacksmith shop. The two ever-present institutions of frontier towns, the tavern and school, were run by the Little family. Samuel Little kept the first tavern while Betsey Little kept the first school. The first post office in the Town was established in 1803. By 1870, the Center contained twenty or so buildings, including two churches, a district school, the Academy (or Town House that was used for Town functions), a hotel known as the Central House (run by John Spooner), and a general store.

Although the upland areas were preferred by Enosburgh's earlier settlers, the Township soon had several thriving smaller villages and hamlets. They included West Enosburgh (then called Jacksonville), North Enosburgh, Samsonville, East Enosburgh (then called Stoneville), West Hill, and Bordoville. Each had its own small businesses, stores, mills, post offices, and schools. West Enosburgh was the site of the first mill in Town; North Enosburgh became known as the "Gateway to Canada" because of its location; Samsonville was noted for a wooden dam built across the river that gave the area the name "the Upper Falls" because it provided hydro power for several mills and even an electric plant; East Enosburgh had a creamery to which many local farmers brought their milk; West Hill, on the eastern side of Enosburgh Mountain, evolved from dense forest in 1800 to open farmland in 1900. It is now almost completely back to forest. Bordoville, located in the southwest corner of Town, was a small hamlet with a grocery store, a school, and a post office. It was named for the Bordeau families who built the Seventh Day Adventist Church there in 1864. By century's end, all of the smaller villages and hamlets would be eclipsed by the Village of Enosburg Falls.

### Schools, Post Offices, and Churches in the 1800's.

During the 1800's, Enosburgh was divided into seventeen school districts with various lots or farms assigned to each. Each of the hamlets had a school as did the areas known as Sand Hill, Trout River, the Woodward Neighborhood, the Wright District, the Perley Neighborhood, the Austin district, and Enosburgh Mountain. As Enosburg Falls became more and more the center of activity, these schools gradually closed and in 1955 all students came to the consolidated school at Enosburg Falls. A brick high school building was built in 1907 and, in 1954, a separate elementary school was built. There have been additions to each since then, plus the building of the Vocational Center building in 1980-1981.

There were six post offices scattered among the hamlets of Enosburgh during the 1800's. The first was at Enosburgh Center, and later, others were established at West Enosburgh, North Enosburgh, East Enosburgh, Bordoville, and Enosburg Falls. These were often in homes or stores and all except for Enosburg Falls gradually closed.

The first church was the Enosburg Center Congregational Church built between 1820 and 1821. The Town of Enosburgh has had eleven churches at one time or another since then which were scattered among the hamlets.



Above: West Enosburgh Methodist Church built in 1883. Right: Enosburg Falls Methodist Church built in 1870.



### The Township's Changing Economy.

The small farms of the early frontier had supplemented their incomes by producing potash from wood ashes (used in fertilizers and soap production) until the market for it dwindled after 1815. In spite of that, the number of farms continued to grow with the 1850 census counting 190 farms in the Township. Although most were small, isolated, and subsistence based, they produced a variety of products including butter, cheese, and maple sugar. Sheep were also quite plentiful at that time and wool was the major cash product. The more perishable products were sold locally while some of the wool was sold at more distant markets. Things were to remain as such until the construction of the Region's first railroad in 1870.

The Region's first railroad was constructed between St. Albans and Richford. The effect on Enosburgh was considerable. With the railroad, distances between Enosburgh and faraway markets shrank. It also brought new goods and services to Enosburgh and saw the expansion of agricultural production increase. By the mid 1900's, the area became known as the "Dairy Center of the World." Dairy farming blossomed into the important industry it is today. New efficient transportation to markets now made it possible for sales of fluid milk as well as large amounts of butter and cheese to expand. As a result, the Town prospered and what had earlier been the little Village of Enosburg Falls grew quickly and had become the dominant center of commerce in the Township. The railroad line has since become the Missisquoi Valley Rail Trail; a 26.4-mile year-round recreation trail for use by residents and visitors alike.

Located at the southwestern corner of the Township along the banks of the Missisquoi River, Enosburgh Village quickly secured its place as the commercial hub to a thriving agricultural community. By being located along the river which provided a suitable site for hydropower, and on the main rail line between St. Albans and Richford, the Village could easily serve its growing population.

In 1883, Charles Ovitt (who owned a mercantile and milling business in West Enosburgh) built the first telephone line in Enosburgh in order to keep track of the railroad schedule. He eventually established a telephone company and in 1906 built the Northern Telephone Building on Main Street. During that same period Dr. B.J. Kendall (a doctor in Enosburgh) developed his famous Spavin Cure for horses. His business's success would have a profound effect on Enosburgh's development.

The Village of Enosburg Falls was incorporated in 1888 as one of the smallest village populations in the state. Shortly after this, a high school was built behind the site of the present high school. The Enosburg Grade School was established in 1890, and by 1900 ranked among the best in the state.

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### Today.

Enosburgh today reflects its history in its predominately agricultural character, lifestyle, and economy. The small subsistence farms have been replaced by larger dairies with modern

equipment. More having can be done in a day by one person with modern machinery than many workers could do in a week years ago. The love of the land and the ability to earn a living from it are still central values in the community. Descendants of the early settlers and farmers, and a steady stream of newcomers intermingle to make up the structure of the Town today.

### Historic Resources.

Historical cultural and archaeological resources are irreplaceable resources which provide a sense of continuity between the past and the present and help us identify who we are. It is important to preserve and promote these resources whenever possible.

The state historic survey lists 3 districts of historic significance in Enosburg Falls: the Downtown Historic District, the Historic Railroad District and the Orchard Street-North Main Street Historic District. The Enosburgh Historical Society is active in promoting the preservation of historic resources in the Town and Village and has pursued state and national designation for local properties and presented programs to educate and inform the public about local history. Table 3.1 below lists sites on the State Register of Historic Sites. See Appendix B for maps of Village historic districts and sites listed below.

Table 3.1. State Register of Historic Sites in Enosburg Falls					
Name of Site	Map Reference	Site Number			
Aseltine & Greenwood Block	Map 1, #7	0603-13			
B.J. Kendall House	Map 3, #16	0603-6			
Carmi Marsh House	Map 3, #45	0603-4			
Catholic Church	Map 2, #76	0603-18			
Dr. William Hutchinson House	Map 3, #15	0603-8			
Dr. A.J. Darrah House	Map 1, #4	0603-10			
Enosburg Falls High School	Map 1, # 10	0603-20			
Enosburg Falls National Bank	Map 1, #3	0603-11			
Kendall's Spavin Cure Building	Map 3, #43	0603-1			
Masonic Hall	Map 1, #8	0603-15			
Merrill Block	Map 1, #44	0603-14			
Methodist Church	Map 1, #84	0603-19			
Moses Perley House	Map 3, #17	0603-5			
Northern Telephone Company Building	Map 1, #42	0603-3			
Old Post Office	Map 1, #13	0603-16			
Olin Merrill House	Map 3, #3	0603-9			
Opera House	Map 2, #7	0603-2			
Original Spavin Cure Building	Map 3, #16A	0603-7			
Perley Block	Map 1, #6	0603-12			
Silver Auction House	Map 1, #38	0603-17			
Source: Vermont Historic Sites and Structures Survey for Enosburg, 2008.					

There are six places that include buildings and bridges listed on the National Register of Historic Places:

• Billado Block (371 Main Street)

- Bridge 12 (Boston Post Road)
- Enosburg Congregational Memorial Church (Town Highway 2)
- Enosburg Opera House (31 Depot Street)
- Hopkins Covered Bridge (Town Road over Trout River)
- Kendall, Dr. B. J., Company (228 North Main Street)

Not included in the Register is the Region's historic settlement pattern of small villages and hamlets, located along well-traveled routes, surrounded by an open, working landscape. This pattern strongly evokes the Region's 19<sup>th</sup> century agrarian heritage, and contributes much to its particular sense of place and community. The Enosburg Telephone Company formed in 1895 when a line was built from Enosburg Falls to West Enosburg, Enosburg Center, and East Enosburg. The central office and exchange were maintained in Enosburg Falls. This building is now the home of County Currier.



Above: The Opera House (Photo Credit: Janice Geraw).

There are two historical markers in Enosburgh and Enosburg Falls. In Enosburgh there is a marker on the Town Green recognizing the birthplace of Larry Gardner, a baseball player. In 2019 a historic marker was added to 123 Depot St. in Enosburg Falls to provide information about the Enosburg Opera House.

The Opera House, built in 1892, still functions as the center of numerous community activities. It is one of the most commodious and handsome public halls in the state. The Opera House is now owned by the Village and Town and is on the National Register of Historic Places. The Town Selectboard appointed a special

committee to seek grants and other funding, while also overseeing the restoration of the facility. To date, remarkable progress has been accomplished with the restoration program.

Smaller landscape features such as stone walls, old barns, outbuildings, corner stones, markers, trees, and old apple orchards and lilac bushes planted around former homesteads, all have historic value and importance. Recognizing the need for more public education on the preservation of these historic features, the Vermont Department of Forests, Parks, and Recreation published in 1994 *Stonewalls and Cellar Holes: A Guide for Landowners on Historic Features and Landscapes in Vermont's Forests*.

### Scenic Resources.

Enosburgh's contribution to the northwest region of Vermont is an extremely rich visual assortment of diverse landscapes, from the sweeping agricultural views west as far as the Lake Champlain islands, to the heavily wooded slopes of the Green Mountains in the east. It is the visual language of the area which plays an important part in how a community is perceived.

Scenic highways and corridors link natural, cultural, and scenic resources to the historic landscape of the area. The visual character of Enosburgh makes it an excellent place to live. The most panoramic views are of the Cold Hollow Mountains, Jay Peak, Mount Mansfield, and other smaller mountains. Enosburgh, like all other towns, should take steps to preserve the

scenic vistas that exist virtually everywhere in the State.

One of Enosburgh's most scenic treasurers, the waterfalls, are hidden to many tourists, friends, and Rail Trail users traveling through the Town and Village who are not familiar to the area. One of the falls is located at the current site of the Bridge of Flowers and Light. Originally, a wooden covered bridge spanned the Missisquoi River on this spot but was removed in July of 1915, and replaced with a cement arch bridge. In 1969, a 245-foot-long bridge was constructed just north of this location and the cement bridge was closed due to deterioration of the structure. In the 1990's the Village decided to preserve



Above: The Falls and Bridge of Flowers and Light (Photo Credit: Janice Geraw).

the bridge given its unique design as a sand-filled arch bridge and it was rehabilitated and converted into a pedestrian bridge. This bridge is known as the Bridge of Flower and Lights. Community members and visitors are invited to stroll along the bricks and view the falls; the bridge provides a spectacular view any time of year.

The Planning Commission supports efforts to promote the bridge and falls as a scenic destination for visitors. Recent projects have been completed to this end. In 2018, the Diesel #1 Generator Building adjacent to the bridge's entrance was rehabilitated and converted to a history exhibit. This building is now open and staffed with volunteers during village events. In 2019, the Conservation Commission worked with Cold Hollow Career Center students to construct and install an informational kiosk at the site. Additionally, in 2019 the Village received grant funds from the Vermont Quick Build for Health program (Vermont Department of Health) to install a kiosk at the Missisquoi Valley Rail Trail intersection, which provides wayfinding to the Bridge of Flowers and Light.

### Goals, Policies and Recommendations.

### GOALS

- Protect and preserve the archaeological, historic and scenic features in Enosburgh for future generations.
- Ensure that new development is sensitive to the historic architecture and development patterns.

### POLICIES

- Encourage participation and documentation of structures which qualify for the National Historic Registry.
- Promote community growth that maintains the land use pattern developed throughout the Town's history densely settled villages separated by open agricultural land.
- Encourage the adaptive reuse of historic buildings.
- Encourage innovation in design and layout of development so that the impact of development on scenic vistas can be minimized.
- Support the efforts of the Enosburgh Historical Society in protecting the historic character and buildings of the community and in informing the public about local history.
- Ensure that the historic integrity of the Enosburgh Opera House is protected in perpetuity.

The natural areas of Enosburgh are important for environmental, ecological, scenic, educational, and recreational uses. The critical or important natural areas include wetlands, flood hazard areas, important wildlife and/or endangered species habitats, and other biological, hydrological, or geological areas.

### Topography.

Upland areas (areas of 1,000 feet or more in elevation) include a good majority of the Northwest Region of Vermont. These areas include most of the Region's more prominent mountains, hilltops, and ridge lines. Many of these are highly visible from public vantage points and contribute significantly to the Region's scenic beauty. These areas also include drainage divides, steep slopes, shallow soils, and exposed, fractured bedrock. These areas are important for upland drainage and groundwater recharge. They also support wildlife habitat, forestry, and outdoor recreation but they generally prevent all but low-density development. For decades, Vermont has established an upper limit for development at 2,500 feet. Areas above this elevation are typically slower to recover from disturbance and are at greater risk to erosion. All development activities, including forestry operations, require an Act 250 permit above 2,500 feet. While the highest elevation in Enosburgh is around 2,100 feet, elevation is an important component to consider in relation to the use of the land.

Enosburgh lies primarily in the Central Highlands physiographic region where the terrain is characterized by broad valleys and rolling hills. The Village lies in the Missisquoi River Valley at 426 feet above sea level as the settlement pattern of the village initially conformed to the meandering curves of the Missisquoi. For the most part, settlement in the Town has occurred at lower elevations, along roads and less than 1,000 feet (see Map 4.2). There are a few areas in Enosburgh where development above 1,000 ft has occurred, mainly along Longley Bridge Road and Woodward Neighborhood Road, and Enosburgh Mountain Road.

Slope conditions (the steepness of the land measured in number of feet of vertical rise over 100 feet of horizontal distance) are a major factor in determining the land's capacity for use and development. The Natural Resources Conservation Service (NRCS) provides general guidelines for assessing slope limitations and are provided in Table 4.1. However, the capacity of any particular site must be evaluated considering the interaction of slope with other features such as soils, vegetation, and the proposed land use.

Table 4.1. Slope Classifications				
0-3%	Suitable for most development but may require drainage improvements			
3-8%	Most desirable for development, least restrictions			
8-15%	Suitable for low-density development with particular attention given to erosion control, runoff, and septic design			
15-20%	Construction costly, erosion and runoff problems likely, unsuitable for on-site septic systems			
>20%	All types of construction should be avoided, careful land management for other uses is needed			

Map 4.1 identifies areas with topographic limitations; this includes those parts of town with slopes greater than 20 percent. These areas impose limitations on residential development, conventional due to septic rules established by the Department of Environmental Conservation (DEC). Unlike lands above 2,500 feet, there is no state regulation of steep slopes, other than DEC septic and wastewater

system permitting rules.



Map 4.1. Topographic Limitations.



Photo: The Cold Hollow Mountains as seen from Enosburgh.



Map 4.2. Community Settlement Patterns and Land Contours.

Soils.

Soils are the most important environmental factor that governs the use of land in rural areas. Soils are classified on the basis of structure, form, composition, and suitability for various types of development. Four characteristics are of primary concern when doing land use planning: bearing capacity, erodibility, drainage, and resource value. The community's agriculture depends upon the availability of high-quality soils in large, adjoining parcels to allow for economical hay and field production. The latest soil survey in Franklin County was completed by the Natural Resource Conservation Service in 1998.



Map 4.3. Prime Agricultural and Forest Soils

Enosburgh is home to soils that formed in water-deposited material on terraces and old lake plains and also to soils that formed in glacial till in the Green Mountains and on uplands. They are generally deep, moderately well drained to poorly drained, silty and clay soils. Where slope and drainage are favorable, these are classified as Prime Agricultural Soils (Map 4.3). Agricultural soils are considered a non-renewable resource and it is important to consider measures to conserve them. The most common soil associations that are found in Enosburgh are the Woodstock-Tunbridge outcrop association, Peru-Stowe association, Cabot-Westbury association, Munson-Buxton-Belgrade association, and the Windsor-Missisquoi association. Woodstock rock outcrop is the most common soil type throughout the Town of Enosburgh while the Munson-Buxton-Belgrade soil group is more common in Enosburg Falls.

### Earth Resources.

Earth resources, including sand and gravel deposits, are critical regional resources, especially because of their use in road maintenance and construction. Sand and gravel are non-renewable resources that are becoming increasingly scarce. The 1972 State Land Capacity Plan Map identified six sand and three gravel deposits in Enosburgh. The gravel deposits are located on Town Road 38, one mile from Route 108 near the intersection of Roads 5 and 20, and on Town Road 7 near the Montgomery town line. Five of the sand deposits are located near each other on Town Roads 1, 42, and 43, and at the intersection of Town Roads 42 and 50. The other sand deposit is on Town Road 7 about one mile from Town Road 10. The Vermont Geological Survey (1974) identified a large sand and gravel deposit of medium to good quality running along the Missisquoi through the Town and Village. It is common for sand and gravel deposits to be located in the floodplain, such as along the Missisquoi; however, environmental costs of extraction likely outweigh the benefits.

It is important to locate these reserves and to consider future use and access when making land use decisions. As Enosburgh develops, more of the earth resources will be needed to meet the

needs of growing infrastructure. In considering the potential for any extraction operation, ground water contamination, the alteration of surface drainage patterns, soil erosion, stream sedimentation, and other environmental impacts should be avoided. At a minimum, any extraction operation must include appropriate site planning and development, erosion control, the phasing of operations, and proper site reclamation.

### Surface Waters.

The Northwest Region of Vermont is home to many types of surface waters shown on Map 4.4. They offer sustenance, scenic beauty, recreational opportunities, and livelihood to the residents and visitors of Franklin County and Grand Isle County. Water is one of the basic necessities of life; and because of that, it must be appropriately respected, managed, enhanced, and preserved to ensure the future vitality of the Region and its inhabitants.

The Missisquoi, along with its associated brooks and streams is an

important element of the local landscape. The Missisquoi River traverses through most of Franklin County (Map 4.4). In Enosburgh, it runs through the northwest section of town and south of the village. The Tyler Branch, which also runs through the Town, is one of its many tributaries. These rivers are a valuable natural and cultural resource. The Missisquoi River and the Tyler Branch provide many beneficial uses such as supplying people with drinking water and providing a place for recreation activities. Maintaining the quality of the rivers is of extreme importance. Not only does it affect the Town, but also it has the potential to directly affect the Missisquoi River Delta and consequently, Lake Champlain. Giddings Brook and Trout Brook are located north of the village and flow into the Missisquoi at points along Route 105.

Photo: Small Tributary of Missisquoi (Photo Credit: Janice Geraw).





Photo: A View of the Falls in the Village of Enosburgh Falls.

Mapping the Stream Channel. Using the state's protocols for geomorphic assessment, portions of the Tyler Branch, Trout River and the main stem of the Missisquoi have been analyzed to determine the causes of flooding, erosion and other water quality issues and to identify potential solutions. Information from these assessments has been used to develop Fluvial Erosion Hazard (FEH) maps for Tyler Branch, which can

depict the area where flooding and erosion hazards are most likely to occur. These maps provide valuable information for town planning and hazard mitigation in Enosburgh and should be considered during town planning efforts.

<u>Water Quality.</u> Water quality, fish and wildlife habitat, scenic values, and recreational experiences can be adversely affected by land uses in the river corridor or along shorelines, especially when the natural vegetation is disturbed. Additional assessments and inventories of local rivers, streams, and ponds will further efforts to improve water quality in Enosburgh and downstream to Lake Champlain. Where there is evidence of poor water quality, the community should determine the source of the contamination and what steps should be taken to prevent harmful pollutants from reaching the water source. Any development proposed along the streambank or ponds should be required to have a naturally vegetated buffer strip; the Town of Enosburgh has specified buffer distances between development and waterways.



Map 4.4. Water Resources in Enosburgh

As of June 2012, there are two streams that flow into the Missisquoi River in Enosburgh that have been identified as being an "impaired" waterway; these streams are Trout Brook and Samsonville Brook. Impaired water refers to a stream where identified pollutants are above the allowable water quality standards, these waters are reviewed every two years as required by the Clean Water Act and a Total Maximum Daily Load (TMDL) plan is developed to identify how the water quality concerns will be addressed.

<u>Recognizing Special Resources.</u> The Missisquoi River Basin Association initiated a study to explore the Wild and Scenic designation eligibility in 2009 for 50 miles of the upper Missisquoi River in Franklin and Orleans Counties and 20 miles of the Trout River. This designation excludes the section of the Missisquoi River with the Enosburg Falls dam. The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. This designation encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection. In addition, it enables access to federal funding for projects to preserve the recreational, scenic, historic, cultural, natural, and geologic resources of these rivers. It should be noted that designation neither prohibits development nor gives the federal government control over private property; recreation, agricultural practices, development and other uses are permissible in this designated area. The Town and Village voted to support this designation at the March 5, 2013 Town Meeting and the designation was approved by Congress on December 19, 2014.

### Groundwater.

Water that is contained within the soil and rocks below the ground surface is considered ground water. Groundwater storage and travel is determined by topography and by the composition of the soils and rocks in which it is confined. Groundwater is the source of over 90% of the drinking water for rural areas in Vermont. It is replenished through rain and surface water that percolates down through the soil.

Vermont's groundwater policy declares that the State " shall protect its groundwater resources to maintain high quality drinking water...[and] shall manage its groundwater resources to minimize the risks of groundwater quality deterioration by limiting human activities that present unreasonable risks to the use classifications of groundwater in the vicinities of such activities (Vermont ANR Groundwater Protection Rule and Strategy). Risks to groundwater, as stated in the statute, are associated with human activity in the vicinity of the aquifer. There are State programs which are designed to protect groundwater. These include those aimed at hazardous materials management, agricultural plant industries, public water supply, well drilling, wastewater management, road de-icing management, and land use regulation.

Groundwater is a critical resource that must be managed effectively. Groundwater quality in Enosburgh and in the Northwestern Region of Vermont is considered generally good but there is always the potential threat of it being contaminated. The Vermont DEC has identified threats to groundwater resources to include such things as animal feedlots, fertilizer applications, irrigation practices, land application, landfills, material stockpiles, pesticide applications, pipelines and sewer lines, septic tanks, surface impoundments, and waste piles. Any activities that introduce

contaminants directly into the ground, such as underground storage tanks, leach fields, or agricultural activities, can affect ground water quality. Any of these land uses should be given serious consideration for their potential impact on ground water.

The Federal Well Head Protection Program was established to protect groundwater that supplies public drinking water systems. Vermont's Well Head Protection Program was adopted in 1990. It emphasized proper management of lands within Well Head Protections Area's to reduce or restrict potentially contaminating activities. The State also has the Groundwater Protection Rule and Strategy that was most recently revised in 2005. It provides restrictions, prohibitions, standards, and criteria for groundwater protection.

The Town of Enosburgh and Enosburg Falls, as well as Berkshire, all rely upon ground water for their local water supply. The wellhead for Enosburg Falls is located in Berkshire, and Berkshire's well head is in Enosburgh. Enosburgh has two wellhead protection sites (Map 4.4). In order to protect the source of water for the East Berkshire Water Coop, a 97-acre area around a spring off of the Woodward Neighborhood Road in the northeast corner of Enosburgh has been designated a wellhead protection site. The second site is located along Route 105 and is a groundwater recharge area for the Village. Land uses have potential to affect the quantity and quality of these water supplies across town boundaries and should be monitored.

### Wetlands.

Wetland areas are defined by the State of Vermont as "those areas that are inundated by surface or ground water with a frequency sufficient to support vegetation or aquatic life that depends on saturated or seasonally saturated soil conditions for growth and reproduction." This definition includes but is not limited to marshes, swamps, sloughs, potholes, fens, rivers, lake overflows, mud flats, bogs, and ponds. Generally, wetlands share three basic characteristics: the presence of water at or near the ground surface, the presence of water-dependent plants occurring on site, and common types of soil. Vermont's wetlands have been well documented as serving critical ecological and socio-economic functions.

Enosburgh's most important wetland is Adams Pond (also known as Woodward Swamp or Beaver Meadow Swamp) and its associated pond systems along Beaver Meadow Brook. The system includes 3 ponds along a 3-mile length from East Enosburgh to the north end of the pond located north of Woodward Neighborhood Road. It is classified as a wooded swamp with floating vegetation and bear activity. There are numerous other small marshy areas with open water, intermittent plant growth, forest cover, or shrubs.

Wetlands have been mapped by the U.S. Department of the Interior, producing a set of National Wetland Inventory maps for each municipality. This information is useful for assessing the general character of a particular area, but is not accurate enough to determine the nature of a particular property without a site visit. This inventory identifies numerous marshlands located throughout the community.

Wetlands serve many different functions that contribute to the quality of the surface and ground water as well as socio-economic factors including the following:
- <u>Flood Control and Stormwater Runoff:</u> wetlands associated with streams slow flood waters, provide flood storage, and reduce peak flood levels
- <u>Shoreline Anchoring:</u> wetlands provide erosion control
- <u>Water Quality:</u> wetlands act as a filter to process heavy metals, pesticides, and other toxic substances and they remove nutrients from run-off water (i.e. agricultural run-off)
- <u>Habitat:</u> wetlands provide habitat for a wide variety of plants and animals including a high number of threatened or endangered species
- <u>Socio-economic Value</u>: wetlands are utilized by humans for their recreational, scenic, historic, educational, and cultural values

Vermont's wetland regulations were last amended effective August 15, 2018 and the current system established a three-tier wetland classification system. Designated Class I wetlands are considered the most environmentally significant and therefore receive the highest level of protection under state law, requiring a 100-foot vegetated buffer between any adjacent land development. There are currently no Class I wetlands located in Enosburgh. Rather, most local wetlands are designated as Class II—protected from development by a 50-foot buffer (see Map 4.4 for the locations of wetlands on the Vermont Significant Wetland Inventory). In addition, the Vermont Wetland Rules require that most development that impacts a Class II wetland obtain a conditional use permit from the Agency of Natural Resources, which may only be granted if it is proven that the proposed development will not have an undue adverse impact on the functions and values of any significant wetlands or their adjacent buffers. Lastly, Class III wetlands are those wetlands with no delineated buffer.

#### Wildlife Habitat.

Supporting a healthy wildlife population through the protection of habitat is an important component to maintaining a healthy ecosystem, and provides significant recreational and economic benefits to the community. An abundant and healthy wildlife population provides enjoyment for both hunters and non-hunters alike. Development in and around wildlife habitat can cause a significant decrease in the diversity and quantity of wildlife. This is especially important with wide-ranging species such as deer, bear, bobcat, fisher otter and moose populations as well as a number of species of concern that have been identified in the Vermont State Wildlife Action Plan. Species of concern include some amphibians and reptiles found in our upland forests and along the rivers and streams in Enosburgh. Wildlife species such as these and other non-game bird species are highly dependent on the river and upland areas for their habitat needs. Refer to the 2004 Open Space and Natural Resources Assessment by Arrowwood Environmental for Wildlife Units and recommendations.

Deer wintering areas provide critical habitat for white tail deer and other forms of vertebrates. These areas of hemlock, spruce, fir, cedar, and pine species provide shelter from deep snows, and they also permit easier winter travel for deer and other species. The combination of elevation, vegetation, and solar aspect, significantly increase the survival rates of deer populations and also impact the landscape ecology and recreation. The U.S. Fish and Wildlife Service has targeted these areas for protection. Deer wintering areas have been identified in the heavily forested areas of Eastern Franklin County - this includes the eastern section of Enosburgh (see Map 4.5).





Large, contiguous wintering areas exist along the Trout and Tyler Branch of the Missisquoi River. There are 3 designated deer yards in Enosburgh; a 124-acre yard on the St. Pierre Road, a fractured series of small yards along the Cold Hollow Brook, and a large yard (over 300 acres) in the northeast corner between Longley Bridge Road and the Woodward Neighborhood Road. Deer yards, aside from providing winter range, are essential for year-round species migration. Careful management of these areas is of extreme importance in order for the species to thrive.

Black bear prefer mountainous and forested landscapes just like those found on the slopes of the Green Mountains. The location of most bear habitat is in Eastern Franklin County in the towns of Enosburgh, Bakersfield, Montgomery, and Richford. Black bear have a significantly large home range and because of this, their survival rate decreases when larger areas are divided up into smaller units and into isolated forestlands. When land is developed in scattered locations throughout the Town, the black bear habitat areas are decreased. Prime black bear habitat is limited to 60% of the state, primarily along the Green Mountain spine and in the Northeast Kingdom. Prime black bear habitat in Enosburgh is found in the eastern section of the town, where the Green Mountains begin and large unbroken tracts of forest remain; Map 4.5 shows identified bear masting areas.

Additionally, Enosburgh shares a 3281-acre wildlife habitat with the Towns of Bakersfield and Montgomery. It is located in the Cold Hollow Mountain and Trout Brook areas. There are also several wildlife connectivity areas that connect distinct timber tracts as shown on Map 4.5. These areas are considered "connectivity areas" as they are the remaining links between large forest blocks necessary for wildlife travel between habitat areas. One critical connectivity area is between two core habitat blocks in the northeast corner of Enosburgh that connects a large block in Enosburgh to a large block in the Town of Richford; much of this area is currently conserved land. These connectivity areas are very important to maintain in order to prevent forest fragmentation of our forests and wildlife habitat. Another noteworthy wildlife habitat area is the Jarvis Brook Heron Rookery. This is a partially wooded, deep marsh area which supports a great blue heron nesting colony on a half-mile stretch of an unnamed tributary of the Jarvis Brook.

#### Fisheries.

The Missisquoi and its tributaries have natural populations of largemouth and small-mouth bass, brown trout, and rainbow trout. The fishery has aesthetic, recreational, and economic value.

#### Forest Resources.

According to 2002 Landsat data, approximately 62% of the land cover in Enosburgh is forest. Statewide, approximately 78% of the land cover is forest according to the Vermont Department of Forestry. Enosburgh forests provide quality forest products while supporting tourism, recreation, wildlife habitat, a clean and reliable water supply, and the scenic and rural nature of our town. Forest areas also provide additional benefits including a source of forestry-related jobs, storm water mitigation, air purification and temperature moderation.

The Enosburgh town forest is located on the east and west side of the Longley Bridge Road and contains 120 acres (Map 7.1). The rest of the forestland in Enosburgh is privately owned and managed. As of December 2012, approximately 15,689 acres enrolled in the State's Current Use Program, of which approximately 5,820 acres were agriculture and 9,878 acres were enrolled

productive forestland. This is an increase of just under 3,000 acres since 2003 and the majority of the change in acreage has been in forestland. Enrollment requires that the owner follow a state approved forest management plan. There is one tree warden, and a forest resource committee that serves the town of Enosburgh.

#### Rare or Endangered Species.

According to currently available information, the Enosburgh does not contain or encompass either rare or endangered species of plants or animals.

# Air Quality.

Clean air is an essential component of Enosburgh's environment and should be protected from local site-specific (e.g. industrial, backyard burning, dust from construction and excavation sites) or cumulative (e.g. automobile emissions) pollutants that could degrade air quality. Protecting the Town from the effects of long-distance airborne pollutants such as acid rain; however, is far more complex and will require cooperative action at all levels of government.

#### Goals, Policies and Recommendations.

#### GOALS

- > Protect the quality of air, water, and land resources through development regulations.
- Protect key natural features, groundwater recharge areas, wetlands, floodplains, streambanks, and local waterways from adverse impacts of development.
- > Provide access to the natural assets of the area for residents and visitors.

#### **POLICIES**

- Protect ground water to ensure quality and quantity of public and private water supplies by regulating uses that could introduce contaminants into the ground.
- Protect quality of surface water to maintain scenic beauty and recreational benefits.
- Protect the water quality of the Missisquoi River and its tributary streams by promoting riparian zone management to aid in the prevention of bank erosion.
- Support and encourage landowner efforts to maintain open land with productive soils for use of local farming operations.
- Guide development away from productive agricultural or forest soils.
- Allow development based upon the capacity of the land considering factors such as soils, topography, and the presence of water and wetlands.
- Limit development in areas where soils have limited capacity to support structures or filter wastes and in areas where slope is greater than 20%.
- Limit use in floodplains to agriculture, open space, and recreation, unless otherwise approved through regulatory measures.
- Protect public access to the Missisquoi River.
- Ensure that development does not result in undue air pollution.
- Limit the loss of location wildlife habitat ad infringement upon wetlands.
- Limit or mitigate the loss of wildlife habitat by protecting wildlife connectivity areas.
- Minimize the fragmentation of forests by other land uses as a way to maintain the working forested landscape and core wildlife habitat.

Safe, affordable, adequate housing is one of our most basic needs and is an important concern to residents of Enosburgh. Availability of a variety of housing types (in equally various price ranges) fosters a diverse community, which is more attractive for residents and helps to facilitate economic development. A range of housing opportunities also strengthens the ability of local businesses to attract and retain new workers so they can compete and expand in the changing economy.

In recent years, access to affordable housing has become a greater issue as housing prices have increased at a greater rate than income. As a whole, Franklin County has a great difference in the supply of, and need for, affordable housing. Towns that are located in the southern tier of the County have a relatively small percentage of families below the County median income. Therefore, there is little housing that would be affordable to households earning the County median income. Town's that are more rural in nature, often provide a large portion of the Region's affordable housing.

#### Current Housing Trends.

Enosburgh experienced a boom in housing growth during the 1980s; the number of housing units increased by 23.6%. This rate of housing development slowed in the 1990s to 3% and from 2000 to 2010 rose up to 10.6% before slowing to 4.2% from 2010 to 2017. Much of the increase in housing during the 1980s resulted from the construction of three incomerestricted housing developments within the village that added 90 affordable rental units to the housing stock (see section *Affordable Housing Development* for more detail). A housing unit is defined as a house, an apartment, a mobile home or trailer, a group of rooms or a single room occupied as separate living quarters, or if vacant, intended for occupancy as separate living quarters.

Although fifty percent of the total housing units are located in the village, the majority of housing development in recent decades has been outside the village, see Figure 5.1. The 2017 American Community Survey reported a total of 1,324 housing units in Enosburgh, of these units 620 were in Enosburg Falls.

Figure 5.1. Total Housing Units in Enosburgh



Source: U.S. Decennial Census; 2013-2017 American Community Survey

Table 5.1 shows the change in population, the number of housing units, and the number of households for Enosburgh, Franklin County, and for the State of Vermont from 1980 to 2017. rate of population growth from 2010-2017 in Enosburgh was minimal while the rate of housing development decreased. This is in contrast to the scenario from the 2000-2010 trend where Enosburgh's population grew minimally but the number of housing units by 10%, thus creating a softer housing market.

Table 5.1. Trends in Population (Popn), Households (HH) and Number of Housing Units (HU)												
	1980-1990		1990-2000		2	2000-2010		2010-2017				
	(%	(% Change)		(% Change)		(% Change)		(% Change)				
	Popn	HH	HU	Popn	HH	HU	Popn	HH	HU	Popn	HH	HU
Enosburgh	22.46	25.03	23.61	9.98	8.07	3.05	-0.25	4.73	10.62	83	21.39	4.17
Franklin	14.92	23.65	19.29	13.6	17.02	11.25	5.13	10.43	12.49	2.24	16.02	3.33
County												
Vermont	10.03	18.12	21.51	8.19	14.23	16.80	2.78	6.57	9.56	18	11.51	2.66
Source: 1980,	Source: 1980, 1990, 2000, 2010 U.S. Census, 2013-2017 American Community Survey											

# Housing Stock.

The vast majority of housing in Enosburgh consists of older, single family homes; 41% of all housing units were built prior to 1960. As of the 2017 American Community Survey, of the town's 1,324 housing units, 1.128 (85%) were yearround units. These included 395 rental units, 64% of which are located in the village. Table 5.2 shows the occupancy status of housing units in Enosburgh for 2017. Eighty-five percent of Enosburgh's housing is occupied and the majority of units are owner occupied (65%). With a 4.5% vacancy rate in 2017 for rental and sale units, the market is considered healthy for buyers and sellers and keeping up with demand.

Table 5.2. Occupancy Status of Housing Units						
for Enosburgh						
	# of Units	% of				
		Total				
TOTAL UNITS	1,324	100%				
<b>Total Occupied</b>	1,128	85%				
<b>Owner Occupied</b>	733	65%				
<b>Renter Occupied</b>	395	35%				
Total Vacant	196	15%				
Seasonal,						
recreational,	85	6%				
occasional use						
Rental	29	2%				
For sale only312%						
Source: 2013-2017 Americ	an Communi	ty Survey				

# Affordable Housing Needs.

The demand for affordable housing is something that needs to be addressed in all communities. Housing is considered affordable when a household pays no more than thirty percent of their income on housing. Lower income households have to get by on tighter budgets and because housing is a basic need that people cannot do without; high housing costs place a greater strain on lower income households than on households with more disposable income. Therefore, affordable housing initiatives generally emphasize the importance of providing affordable housing to households that are at or below the median income of the area.

The price of housing in Enosburgh has generally been lower than the regional and statewide trends (Figure 5.2). According to the Vermont Housing Data in 2018, the median sale price of a

primary residence in Enosburgh (\$148,500) was \$55,500-\$66,500 lower than that of Franklin County (\$204,000) and the state as a whole (\$215,000). However when compared with other local housing markets, including St. Albans Town (\$265,000), Swanton (\$191,000), Fairfield (175,000), and Richford (\$104,500), Enosburgh appears to be in the middle of the range of homeownership affordability.



Figure 5.2. Median Sale Price of Primary Residence

To define affordable housing, the state has determined that 80% of the median household income (or median metropolitan statistical area (MSA) income, if it applies) should be able to afford to pay no more than 30% of their income on housing. This definition is used as an indicator for the availability of affordable housing in a community. Homeownership housing costs include not only the mortgage, but taxes and insurance. In the case of rental units, the cost is defined as rent plus utilities.

All municipalities in Franklin County are deemed part of the Burlington-South Burlington Metropolitan Statistical Area. The figures for median income, however, do not paint an accurate picture for many of the municipalities within Franklin County. The 2017 median household income for the Burlington-South Burlington MSA was \$65,476, while it was \$62,214 in Franklin County (2013-2017 US Census). For this reason, the Northwest Regional Planning Commission uses the county median household income to compute affordability statistics.

Table 5.3. Household Income						
Distribution						
Income	% of Households					
Less than \$24,999	23%					
\$25,000 to \$34,999	10%					
\$35,000 to \$49,999	13%					
\$50,000 to \$99,999	38%					
\$100,000+	17%					
Source: 2013-2017	U.S. American					
Community Survey						

The U.S. Census estimated the 2017 median household income in the Enosburgh to be \$54,900 versus \$62,214 in Franklin County as a whole. While the data do not allow for calculating the number of households that are considered "low-income" or earning less than 80% of the median (\$43,920); approximately 23% of the population are considered "very low income" or households earning less than 50% of the median. It is estimated that 13.1% of individuals were under the poverty level.

The following two tables (Table 5.4. and 5.5) compare maximum affordable mortgages and rents in Enosburgh with the median sale price for a primary residence and median rent based on spending no more than 30% of household income on housing. The affordability gap is the difference between the available income and the maximum affordable mortgage or rent. The median income represents moderate-income households or families and 80 percent represents low-income households or families. A family consists of two or more related members while a household refers to all people who occupy a housing unit regardless of relationship. All families or households earning the median income are able to afford homeownership however for the lower income populations the ability to bridge the gap to affordability can be large. At both the community and county level the median family income is greater than median household income; these groups are better able to afford homeownership. Rental housing in Enosburg Falls appears to be more affordable for median and low incomes, while very low incomes have a gap of 17 dollars.

Table 5.4. Affordability Gap for Home Ownership in Enosburgh									
Income	30% of Income Per Month	Taxes & Insurance	Income Available for Housing Per Month	Maximum Affordable Mortgage	Median Sale Price Primary Residence	Owner Affordability Gap			
County Median Family Income	\$76,898	\$1,922	\$414	\$1,508	\$252,855	\$204,500	\$48,355		
Low Family (80%)	\$61,518	\$1,538	\$414	\$1,124	\$188,404	\$204,500	\$(16,096)		
Median Family Income	\$65,625	\$1,641	\$414	\$1,227	\$205,614	\$145,000	\$60,614		
Low Family (80%)	\$52,500	\$1,313	\$414	\$899	\$150,612	\$145,000	\$5,612		
County Median HH Income	\$62,214	\$1,555	\$414	\$1,141	\$191,319	\$204,500	\$(13,181)		
Low HH (80%)	\$49,771	\$1,244	\$414	\$830	\$139,176	\$204,500	\$(65,324)		
Median HH Income	\$54,900	\$1,373	\$414	\$959	\$160,669	\$145,000	\$15,669		
Low HH (80%)	\$43,920	\$1,098	\$414	\$684	\$114,656	\$145,000	\$(30,344)		

Source: Median Household Income, Median Family Income (American Community Survey 2013-2017); 2017 Median Home Sale Price (Vermont Housing Data); taxes and insurance estimated; all other figures computed by NRPC.

Table 5.5. Affordability Gap for Renting in Enosburgh						
Income	Income Available for Rent/ Month	Median Gross Rent	Rental Affordability Gap			
Median Family	\$1,641	\$703	\$938			
Low (50 - 80%) Family	\$820 to \$1,313	\$703	\$117 to \$610			
Very Low (≥50%) Family	< \$820	\$703	\$117			
Median HH	\$1,373	\$703	\$670			
Low (50 - 80%) HH	\$686 to \$1,098	\$703	(\$17) to \$395			
Very Low (≥50%) HH	< \$686	\$703	(\$17)			
Data Source: 2013-2017 U.S. Census						

# Affordable Housing Developments.

Vermont Statute defines "affordable housing development" as a housing development of which at least 20% of units, or a minimum of 5 units, whichever is greater, are affordable housing units. It also states that affordable units shall be subject to covenants or restrictions that preserve their affordability for a minimum of 15 years or longer as provide in municipal bylaws.

There are currently two developments of subsidized affordable housing in Enosburg Falls. Pleasant Street Apartments provides apartments 24 (8) one bedroom and 16 two bedroom), all of which are available to families making less than 60 percent of the median income. The second development of affordable housing, Falls Housing Inc., was open for occupancy in 2007 after rehabilitation of the Depatie Block on Main Street in the center of the Village, which was destroyed by fire in 2005.



Photo: Falls Housing Inc.

(Photo Credit: Janice Geraw)

The redevelopment includes six units in the upper levels of the Merchants Bank Buildings, with a total of 28 units. Three units are market rate, while the remaining 25 are available to households earning 60% of the median income. Given the disparity between median income and the median sale price, the need for more affordable housing is apparent.

Adequate provision of housing options for the elderly is important as the baby boomers age, increasing the proportion of the elderly in the community. There is one level 3 assisted living facility (Brownway) and one apartment complex (Riverbend Apartments) available to the elderly

and disabled through Section 8 funding. Brownway is a 36-unit care facility with some subsidized rooms. Riverbend Apartments offers 30 units of housing for elderly and disabled with rents pegged to income.

#### Affordable Housing Opportunities.

When possible, affordable and senior housing should be located conveniently near community services and the Village area to make it easier for residents to access needed services without a vehicle. The accessibility of public infrastructure contributes to the availability of low-cost housing. In particular, sewer and water connections allow for higher densities and lower land costs by minimizing the amount of land that is necessary to accommodate new development. Affordable housing developers often depend on these public facilities to reduce building costs and pass on savings to the buyer or renter. Utilizing small, in-town lots for infill development and rehabilitating existing structures can also help create housing, which is naturally more affordable.

Mobile homes are also an important source of affordable housing. Vermont land use law does not allow municipalities to discriminate against or segregate mobile homes. Mobile homes in a town can provide an opportunity for those who cannot afford conventional housing.

#### Goals, Policies and Recommendations.

# **GOALS:**

- Ensure adequate housing options for people of all income levels, ages, household types, and preferences.
- > Promote safe, healthy and affordable housing for all segments of the population.

# **POLICIES:**

- To conserve and protect the vitality and quality of existing residential neighborhoods or areas.
- To encourage compatible infill residential development in existing neighborhoods.
- To support the historic rehabilitation of the existing housing stock.
- To maintain existing rental units and support the creation of new ones with consideration for the character of the surrounding neighborhood.
- To encourage the development of senior housing opportunities located near necessary amenities.
- To promote and support zoning that allows and encourages increased densities for the purpose of providing affordable housing, such as planned unit developments, while preserving the character of older neighborhoods and the village areas.
- To promote low-density residential housing in areas without municipal services and higher densities in parts of town with existing services or close to existing service boundaries
- To promote housing developments that provides opportunities for a mixture of incomes and includes or provides access to commercial, civic, and recreational uses.
- To support housing connected to schools, safe areas for physical activity and healthy food access via safe walking and biking routes.
- Encourage the development of housing that is energy efficient to reduce heating and electricity costs.

#### History.

Beginning in 1806, Enosburgh Town leaders arranged for the orderly education of local youth by dividing the Town into districts, which were made up of farms or lots. Enosburg Falls began its educational history as District Number 7, composed of 18 lots. The first school in the Village was built of logs in the 1820's, according to Janice Geraw's history of Enosburgh, and was replaced after being "set fire to by one of the pupils." The present Enosburg Falls Middle & High School was originally built in 1907, over 100 years ago, as a Kindergarten through grade 12 facility. In 1954, Town and Village school administrators closed the scattered school districts throughout Town and approved plans for a new elementary school to be built in the Village, which was built in 1956 and was last expanded in 1988. Voters have approved three additions to the Middle and High School, in 1945, 1981, and the most recent in 2001 (completed in 2004).



#### Educational Facilities and Enrollment.

Enosburgh has three educational facilities which are all located in the Village of Enosburg Falls. Together the schools offer regular and special educational programs which range from preschool to adult education. All three buildings provide access to technology to assist with student learning such as Internet and cable TV. The high school has a satellite dish which enables it to downlink programming. The school system's aim is to provide a quality education for the community's children and its adults.

As of July 1, 2019, the Enosburg Falls School District and the Richford School District merged due to Act 46. The district became the Enosburgh Richford Unified Union District. The ERUUSD is run by an elected six-member board.

The Enosburg Elementary School includes kindergarten through grade five and includes two prekindergarten programs for 3 and 4-yearolds; these programs have been in existence since the 2010-2011 school year. In 2005, grade 6 was moved to the Middle School to relieve the Elementary School from space limitations. Since that time, enrollment numbers have fluctuated with a peak in 2008 at 231 students at the Elementary School; overall the enrollment has been relatively stable at around 200 students. With the inclusion of the pre-kindergarten programs the current enrollment for 2018-2019 is 278. Even though grade 6 was moved to the Middle School in 2005, space limitations remain an issue for the Elementary School. The current capacity of the school is around 350 students. Several things contribute to the space crunch including, an increase in the number of special needs students and the facilities and staff to serve them and increasing enrollment. Currently, the school uses the gymnasium as the cafeteria, which adds an additional space constraint. The Village has had discussions on how to address the space limitations in the Elementary School, but there are no official plans yet.

Table 6.1. Enosburg Falls School Enrollment Information											
Grade	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	% Change 2009-2018
K	43	27	31	31	39	29	37	32	41	40	-7.0%
1	39	42	29	34	29	39	26	35	34	39	0.0%
2	40	41	40	28	31	32	39	26	34	36	-10.0%
3	25	39	41	38	28	24	35	42	23	34	36.0%
4	38	30	36	45	44	26	29	33	48	23	-39.5%
5	27	39	27	36	42	43	25	25	37	41	51.9%
6	38	26	42	29	42	43	42	26	28	32	-15.8%
7	38	36	25	39	26	48	42	44	29	26	-31.6%
8	28	42	34	26	36	26	48	41	44	30	7.1%
9	100	93	80	80	72	93	78	88	84	101	1.0%
10	82	101	85	83	79	76	96	73	94	82	0.0%
11	78	81	87	86	78	82	76	99	71	90	15.4%
12	88	77	79	72	84	76	76	67	91	65	-26.1%
Total	664	674	636	627	630	637	649	631	658	639	-3.8%
Source: F	Source: Franklin Northeast Supervisory Union; Enrollment as of October of Year Provided										

The Enosburg Falls Middle and High School is a NEASC accredited school, which houses grades six through twelve. It is one of only five high schools in Franklin County. Enrollment at the Middle and High School from 2003 to 2008 fluctuated around 500 however since 2009 attendance has been around 420 to 450 students. The fluctuation can be due to the presence of

tuition students who may choose to attend high school at Enosburg, Richford, Saint Albans, Swanton or Lamoille Union. Enosburg High School also receives tuition students from the towns of Bakersfield, Berkshire, Fairfield, Sheldon, and Montgomery. As of 2013, the State is allowing universal high school choice allowing students to go to any high school in Vermont provided there is capacity to accommodate them. Many towns served by the school system are growing more rapidly than the Enosburgh area therefore forecasting the number of tuition students, a most important factor in planning and budgeting, has become difficult.

The 2004 renovation to the Middle and High School was planned for a maximum capacity of up to 650 students. Capacity is sufficient for the current number of students (see Table 6.1) and for many years to come at the current rate of growth.

The Cold Hollow Career Center (CHCC), built in 1981, offers college and career opportunities to students from Enosburgh and Richford High Schools as well as adult students served by the area School District. The programs include automotive, forestry and natural resources, building trades, business leadership, cosmetology, digital media production and medical careers. Evening adult programs are offered during both spring and fall semesters. The Center has a capacity of approximately 105 students based on the capacity of service, 15 students per program and offers seven core programs. Through CHCC, many students interact with the community within their chosen field.

All Enosburg Falls educational facilities are located in or near the center of the Village. This provides convenience for transportation and for community use of the buildings and adjacent athletic fields. The cost of maintaining a school is shared between the Town and Village, the State, and the Federal Government.

#### Other Educational Facilities.

The majority of colleges are located either in or around Burlington or in St. Albans. The Community College of Vermont (CCV) offers courses and degree programs in both Burlington and St. Albans. The CCV is part of the Vermont State College System and has links to other higher education facilities around the State. The University of Vermont, St. Michael's College, Burlington College, and Champlain College are all located in the Burlington area while Johnson State College is located in Johnson.

#### Goals, Policies and Recommendations.

#### **GOALS:**

- Coordinate enhancement and expansion, as needed, of educational services and facilities to meet the current and future needs and requirements of the community and areas served.
- > To provide high quality, broad-based educational services for the people of the community.

#### **POLICIES:**

• Work to maintain and expand cooperation and coordination between the municipal and school entities (Enosburgh School District, Town of Enosburgh, Village of Enosburg Falls, Franklin Northeast Supervisory Union, and School Boards) to ensure that the District's long-term plans are consistent with those of the Town and Village.

- Assure that the quality of school facilities and capacity is sufficient to meet planned community growth.
- Assure access to educational and vocational opportunities are broadened and maintained, though such programs as Adult Education, GED and free library services.
- Encourage community involvement in the school system.

# **Chapter 7: Public Utilities, Facilities and Services**

#### Water Supply and Systems.

The majority of households outside of the village are served by a private water source such as a drilled or dug well or a private company. A little less than half of all households in the Northwest Region obtain their water from public water systems. The State of Vermont defines public systems as systems that have at least ten service connections or serve at least twenty-five individuals. Groundwater is a vulnerable resource and the source of most drinking water.

Enosburg Falls is served by a municipal water system supplied by two drilled wells located in the Town of Berkshire; Well #1 has been in service since 1960 and Well #2 since 1979. Demand for municipal water was 15% of combined well capacity in 2007 and therefore no additional capacity needs are anticipated in the near future. A new reservoir with a capacity of 750,000 gallons was built in 1990. A 16-inch line carries water from the reservoir to the intersection of Water Tower Road and Route 105. A 10-inch line extends from there to the corner of Pleasant and Elm Streets. From this point, water is carried down Elm and Main Street through an 8-inch and 6-inch line respectively.

There are no major water system expenditures expected in the next 5 years. There have been several line improvements over the last five to ten years; the Village has incorporated upgrades with street improvements. In 2012, a new 12inch water main was installed on Pleasant Street from Elm Street to the 10-inch line on Depot Street; this line has made a noticeable improvement to water for most of the fire hydrants in the Village.

#### Village Electric Department.

The Village of Enosburg Falls is serviced by its own Electric Light Department (EFELD), which was built in 1896 at a cost of \$16,827.34. The local utility includes two hydro plants with a combined generating capacity of 900 kilowatts (kW). On average, the hydro plants generate 15% of total electric demand. Additional sources of electricity include Hydro Quebec and purchases from the New England Power Pool. The system has expanded over the years and continues to serve the community and the surrounding area.

A 5-member board consisting of Village Trustees and the Village Manager govern the EFELD. The department serves the entire Village of Enosburg Falls, most of the Town of Enosburgh, parts of Bakersfield, Sheldon, Fairfield, Berkshire, and Franklin. Currently the department has 1,765 customers. Connections to the EFELD increased by close to



Figure 7.1. EFELD Service Area. Source: VT Dept. of Public Service.

31 percent from 1994 to 2018 (Table 7.1). The majority of total connections are largely residential uses located inside the Village; however, in the last two to three years there has been an increase in the number of hookups for sugar bush operations.

Table 7.1. Electric Department Hookups by Customer Class							
Category	1994	2001	2006	2012	2018	Increase	% Increase
Residential							
Village	559	568	550	577	964	+ 405	+ 72.45%
Outside	681	773	847	890	580	- 101	- 14.83%
Small Commercial &	106	171	175	198	221	+ 115	+ 108.49%
Industrial							
Total Electric       1,346       1,512       1,572       1,665       1765       + 419       + 31.13%							
Source: Enosburg Falls Electric Light Department. 2012 Annual Report; Enosburgh Falls Town							
Clerk 2019.							

The hydro plants underwent substantial upgrade in 1992, which included new automated controls, crest and head gates, intake structure and fish passage. Since then, the EFELD received federal grant money and bond approval to upgrade the Village substation and distribution lines, which was completed in 2003 and 2004. As a recommendation for system efficiency from the Comprehensive Electrical Distribution Report, the department has replaced most of the 2.4 kV Delta system in the Village with higher voltage of 12.47 kV. This upgrade creates better system reliability and lower line losses and makes critical improvements with regards to employee safety. In 2017 and 2018, the Village's Electric Department completed a \$2,000,000.00 renovation project to Village Plant #1 hydro generator. The work completed has created greater efficiencies, capacity for generation, and ensured that Plant #1 and the Kendall Plant will continue to operate into the coming decades.

Electric utilities file annual reports with the Department of Public Service and Public Service Board that outline the number and type of outages that occurred during the past year. As part of that report, EFELD is required to indicate the worst performing area and what corrective measures are planned to rectify the problems.

Vermont law requires all electric distribution utilities to prepare and integrated resource implement plans ("IRP"). According to 30 V.S.A. § 218c, integrated resource plan is a an comprehensive, long-term plan for meeting the public's need for energy services, after safety concerns are addressed, at the lowest present value life-cycle cost, including environmental and economic costs, through a strategy combining investments and expenditures on energy supply, transmission and distribution capacity, transmission and distribution efficiency. comprehensive energy efficiency and programs. An Integrated Resource Plan was last filed with the Public Service

Below: The Falls (Photo Credit: Janice Geraw).



#### Board in March 2017.

The Energy Chapter discusses electricity service, costs, and efficiency and conservation programs related to electricity.

#### Wastewater Disposal and Sewer System.

The Village of Enosburg Falls operates an extended aeration wastewater treatment facility constructed in 1977. All but a few Village residences are connected to this system, while there are no connections outside the Village. Those that are not connected have onsite sewage disposal. There are no current plans to connect these residents due to physical and financial limitations. The system is permitted for 450,000 gallons per day and in 2018 was at 56.9% of the permitted levels, allowing sufficient reserve to meet planned growth demand; in 2018, there were 194,162 gallons per day in reserve. The Village contracts the disposal of its sludge to an approved facility, which had a cost of \$74,994.00 in 2018. The facility was refurbished in 2012 to handle increased flows during intense rainfall and to provide increased disinfection contact time.

Because the Missisquoi River and its tributaries traverse through Enosburgh, it is important that the community take steps to ensure the protection of its stream bank area. Development in these areas presents a difficult and potentially serious set of wastewater disposal problems. Existing homes or camps may have inadequate or failed septic systems and these have the potential to discharge directly into the river. This can cause harm not only to the river but also indirectly to Lake Champlain.

#### Stormwater Systems.

The term "stormwater" applies to rain and snowmelt that runs off impervious surfaces like roofs, driveways and paved streets, rather than infiltrating into the ground and natural water cycle. As it flows into streams and lakes, stormwater runoff often picks up pollutants such as oils, fertilizers and sediment. Excess stormwater also contributes to erosion and increases stream volumes during peak storm events. Larger municipalities may attempt to mitigate the negative impact of excess stormwater runoff through the creation of storm sewers, and even stormwater treatment plants. Enosburgh's stormwater drainage system consists of series of drainage inlets within the village, as well as a network of culverts and ditches along the town highway network.

The Planning Commission encourages new residential and commercial development to implement stormwater mitigation strategies, otherwise known as Low Impact Development (LID). Common LID techniques that mitigate the adverse impacts of stormwater runoff include on-site rain gardens and grass swales; the utilization of cisterns and rain barrels; and the installation of pervious pavement and sidewalks.

#### Solid Waste Disposal.

Enosburgh is a member of the Northwest Vermont Solid Waste Management District. A small number of private contractors serve residents with curbside pick-up of trash and recyclables; recycling is mandatory within the District. All solid waste disposal and planning are managed by the Northwest Vermont Solid Waste management District, as outlined in the district's most recent Solid Waste Implementation Plan.

#### Telecommunications.

Accesses to telecommunication services are increasingly important to the security, quality of life and economic needs of residents and businesses. Cable, DSL, and cellular service are available in the Village and in select areas of the Town. Many town residents have access to high speed internet.

Telecommunication towers and related infrastructure require careful consideration. These structures tend to be located in highly visible locations such as on mountaintops and ridgelines. The need for additional facilities is projected to increase dramatically in the coming years. The Federal Telecommunications Act of 1996 placed certain limitations over municipal control of these structures; however, within those confines, Enosburgh must act to protect the community's historic character, rural nature, and aesthetic beauty.

#### Public Buildings & Public Land.

Enosburgh residents have a long history of contributing land, infrastructure, and facilities to enhance the community's quality of life. For example, the B. J. Kendall Company constructed the Opera House and water system and, in 1899, Olin Merrill, the Kendall Company business manager, donated Lincoln Park and furnished quarters for the first public library on the Merrill Block.

Enosburgh has a variety of public land and facilities within its boundaries; however, many of these properties are not in active use. Since land in public ownership is not taxed, it is important to consider present and future needs and potential use of these properties so that they can be properly managed, used, or disposed of to generate funds for management of other properties that better serve the needs of the community. A listing of properties in public ownership in Enosburgh is provided in Appendix C.

#### Library.

Enosburgh maintains a free library that is located on Main Street behind the Town Clerk's office. Built in 1984, this modern facility houses over 20,000 titles in books, audio books, and videos. The hours for the Town library have been expanded and it now has both full-time and part-time librarians to better serve the public. The library does meet the State standards for library facilities and services.

The Enosburgh Public Library promotes reading and literacy for everyone in the community, provides a safe and welcoming environment, and offers current and significant material as well as information resources.

The Library's focus of its services is on the development of interest and proficiency in reading, particularly reading for pleasure. The library provides access to learning of all kinds through its collection and programs, through Inter-Library Loan and internet access, and through collaboration with groups, the schools and individuals. It also serves as a gathering place for discussion and a center of the community.



Map 7.1. Utilities, Facilities and Services in Enosburgh

# Municipal Clerk's Office.

The Town of Enosburgh and the Village of Enosburg Falls maintain separate offices. In 2014, Enosburg Falls relocated its administrative offices and completed substantial renovations to the new site. These offices are of adequate size for Village administrative functions for at least 5 years. There is a need for more space at the Town of Enosburgh's administrative offices. However, there are no current plans to move or expand the Town's offices.

#### Cemeteries.

Enosburgh has several cemeteries in town and in the village area which are maintained by private citizens and associations. Occasionally, the cemetery in East Enosburgh receives help from the Town in the form of equipment or town employees for maintenance. Table 7.2 provides a list of cemeteries in the Town and Village; these facilities are also listed on Map 7.1:

Table 7.2. Cemeteries						
CEMETERY	LOCATION	<b>OPEN CAPACITY</b>				
Missisquoi	Enosburg Falls	Over 100 single lots				
St. John the Baptist	Enosburg Falls	Over 100 single lots				
Main Street	Enosburg Falls	Full				
Bordoville	Bordoville	-				
Enosburgh Center	Enosburgh Center	-				
Bessay	Stoneville/East Enosburgh	-				
Steven's Ferry	North Enosburgh	-				
West Enosburgh	West Enosburgh	-				

Enosburgh should plan to ensure that adequate space is available for future needs. One option is to determine if there is land available that could be reserved for future expansion of the existing cemeteries. The municipalities should also ensure that funding arrangements are made for long-term maintenance of cemeteries.

#### **Rescue Services and Fire Protection.**

Rescue services and firefighting services are two services that are absolutely essential for communities to function. Enosburgh has volunteer organizations that provide both of the community's emergency services. The organizations are made up of dedicated members who are on call twenty-four hours a day. Members of both organizations are qualified and trained through State and local training programs.

Both services participate in the mutual aid compact in Franklin County and bordering

Photo: Emergency Services Building (Photo Credit: Janice Geraw).



Canadian communities. When needed, they assist with trucks, heavy equipment, and personnel at emergencies including fires, accidents, and disasters.

Fire protection services are housed in the new Emergency Services Building on Route 105 north of the Village. Currently, there are twenty-six volunteer members who serve on the department. The annual budget for 2012-2013 is level funded at \$123,300 for the fire department. The department responded to 99 calls in 2012, all calls outside of Enosburgh (29) were for fires (mutual aid) or for vehicle accidents (heavy rescue). They have also developed fire protection plans and mapped accessible water sources throughout the Town in order to provide all residents with maximum protection. The Fire Department has stated that fire hydrant pressure remains a concern, especially in the Central Business District. While the Village has made substantial progress on this issue by installing new water lines in the northern section of the Village, further improvements are needed to ensure the safety of residents.

Existing equipment for	Table 7.3. Equipment	t Inventory		
the department is provided in Table 7.3;	Vehicle	Manufacture Date	Anticipated Replacement	
funding for equipment	Fire Pumper/Tanker	1992	As funds and grants allow	
comes from property	Fire Pumper/Tanker	1995	As funds and grants allow	
taxes and grant funds.	Fire Pumper/Tanker	2017	As funds and grants allow	
There is a yearly \$5,000	Fire Pumper/Tanker	2006	As funds and grants allow	
which is funded from the	Ambulance	2013	As funds and grants allow	
department's budget. It is	Ambulance	2017	As funds and grants allow	
not anticipated that any	Source: 2020 Vehicle and Mobile Equipment Schedule			

of the current equipment will need replacing within the next five years however funding is needed to continue repairs for the older equipment.

Enosburgh's Ambulance Service is also located in the new Emergency Services Building. The service is equipped with three ambulances that currently meet the needs of the service. The ambulance service pays sixty percent of the building's operating and maintenance costs. Currently, families are encouraged to subscribe to the ambulance service by paying a household fee. For the year ending in 2012, ambulance service expenses were \$447,375 while their revenue was \$371,389. Enosburgh provides ambulance services to the Towns of Berkshire, Bakersfield, and Franklin. The Enosburgh Ambulance Service also provides advanced Emergency Medical Training personnel for these communities when needed. The ambulance service responded to 760 calls in 2012.

The Town of Enosburgh, together with the Village, has adopted a Rapid Response Plan for responding to emergencies. This plan will be updated yearly. The 911 emergency system has also been implemented.

#### Law Enforcement.

The Vermont State Police and the Franklin County Sheriff's Department are responsible for public safety and law enforcement in Enosburgh. The State Police have a barracks in St. Albans

with dispatching services based out of the Williston barracks. The Franklin County's Sheriff's Department covers Franklin County and contracts with individual municipalities requesting additional police services. A contract with the County Sheriff's Office provides a School Resource Officer available to schools in the School District. Crime statistics for the region can be obtained from the Department of Public Safety – Criminal Justice Services.

#### **Recreational Facilities and Programs.**

The Enosburgh area offers a variety of public and private recreation opportunities, ranging from parks, athletic fields, public access to the river, and trail networks. There are two Village parks, which provide quiet, open spaces. These include Lincoln Park and Maple Park.

The Missisquoi River offers many opportunities for recreation, tourism and enhancement of the Village Commercial District and surrounding areas. The 740mile Northern Forest Canoe Trail is located on the Missisquoi River and hosts a primitive campground. A new public access to the Missisquoi River is provided by Island View Park, a 7-acre parcel on Duffy Hill Road that was obtained with the assistance of the VT River Conservancy. The Village also hosts the Brownway River Trail, an easy 0.9-miles trail that runs alongside the Missisquoi River taking you through fields, forests and floodplains, perfect for hiking, and snowshoeing. The walking Elementary School maintains a storywalk along the trail during the summer.

There are athletic fields located adjacent to the high school on School Street and additional athletic fields are located by the Town Emergency Service Complex which



Above: Lincoln Park. Below: Missisquoi Valley Rail Trail (Photo Credit: Janice Geraw).



was secured by the Enosburgh Recreation Committee. The facilities at the Enosburgh recreation fields also includes one little league ball fields, a basketball court, a soccer field, and a walking trail. The Recreation Committee received a 2019 Municipal Planning Grant to complete a master plan to renovate the Enosburgh Recreation Fields and improve the offerings for all segments of the community. The Village is in the process of securing the right-of-way necessary to construct sidewalks on the north side of Route 105 to provide safe pedestrian access the recreation fields, funded by a Vermont Bicycle and Pedestrian Grant.

Throughout Enosburgh there are trail networks used by snowmobiles, skiers, and all-terrain vehicles. The town also manages a Town Forest accessed off of Longley Bridge Road and available for hiking/walking. It is referenced further in Chapter 4: Natural Features.

The most significant year-round multi-purpose recreational trail in the Village is the Missisquoi Valley Rail Trail, which connects Enosburgh with Richford to the north and St. Albans to the south. The trails' overall length is 26.4 miles. Mile marker 16 to 17 runs through the Village. Marker 17 to 19 through rural Enosburgh and 19 to 21 through North Enosburgh. As quoted from the Guide to the Missisquoi Valley Rail Trail "The landscape offers postcard-perfect views of the Missisquoi River rapids, Jay Peak, and adjacent farms". Working with the Village Trustees and Selectboard, the Planning Commission is committed to supporting this community treasure. Promoting the MVRT as an economic development tool was one of the main goals of the Vital Village master planning process.

The Enosburgh Recreation Committee opened the Enosburgh Community Center, located at 140 Missisquoi Street. This is space is used year-round to increase indoor recreational opportunities in Enosburgh and surrounding areas, by offering indoor games, community events, enrichment classes, free community meals, meeting space for community groups, and more.

Commercial recreation in the area includes a bowling alley and an 18-hole golf course.

While there are various recreation opportunities available to young and old in Enosburgh, the Planning Commission is unsure whether all recreation needs are sufficiently met. A community wide discussion on needs and gaps in current recreation opportunities is needed before any specific recommendations for additional recreational facilities can be made.

#### Health Services.

Residents of Enosburgh, as well as those of the surrounding communities, are currently served by a number of private and public health care providers located mainly in the Village. A variety of individual and group practices offer a range of health services in the area including general medicine, pediatrics, physical therapy, gynecology, mental health services and home health. Emergency health care services are offered at hospitals in St. Albans, Morrisville, and Burlington. There are two veterinary services located in Enosburgh.

#### Community Health.

The town and village of Enosburgh values the health and well-being of all residents. The major threats to population health are categorized into three priority areas: Substance Misuse, Chronic Disease, and Mental Health. Substance misuse rates are continuously increasing among youth and adults, over 50% of deaths in the region are contributed to preventable chronic diseases, and there is an increase in the amount of poor mental health days and mental health crisis arising in the Northwest region. These community health threats carry a great economic burden both statewide and locally. However, data shows that when a population has good health, economic growth rates also increase. Prevention works, saving money and lives long term. Unhealthy communities see the effects in all sectors of society. Employment, health, public safety, and education are all negatively impacted when populations are facing addiction, mental health crisis and chronic disease. The town and village of Enosburgh will engage in non-regulatory and

regulatory prevention efforts with the help of key community partners, coalitions, and government entities to decrease youth substance use, chronic disease prevalence, and poor mental health.

#### Childcare Services.

Childcare is a strong concern for existing and prospective families with young children, whether it means finding quality services or securing the costs of services. High quality, affordable childcare is a critical component to supporting a stable workforce.

According to the Vermont Department for Children and Families/Child Development Division (as of August 2019), Enosburgh has four registered childcare homes and two licensed centers. The total capacity of these facilities is roughly 117 children; infant capacity is generally limited. According to the 2017 American Community Survey, in Enosburgh 134 children were under 5 years of age and 143 children were between the ages of 5 and 9. While the data do not allow for a direct look at what portion of the population needs are being served, these figures can provide an estimate of potential need.

#### Enosburgh Households

87% of family households with children under 6 years have both parents in the workforce.

70% of family households with children aged 6-17 have both parents in the workforce.

39% of family households are single parent with children under 18 years.

Source: 2013-2017 American Community Survey

It is difficult to assess the availability and quality of

childcare in the community. For instance, childcare openings in Enosburgh may also be filled with children from adjacent municipalities and likewise Enosburgh children fill spots in adjacent communities and St. Albans. Further data on other childcare options, such as grandparents, siblings, stay at home parents, un-registered childcare homes or other opportunities, and the quality and affordability of existing services is not available.

It is important to note that the childcare industry can contribute to the local economy by creating jobs and supporting a stable workforce. The accessibility, affordability, and quality of child care may affect a parent's ability to enter and remain in the workforce and to be a productive employee.

#### Goals, Policies and Recommendations.

#### GOALS

- Provide public utilities and services in a manner that supports existing development and facilitates future growth at the appropriate time, scale, and location.
- Ensure community services and facilities meet the needs of local residents of all ages without undue or sudden impacts upon local property taxes.
- > Protect public health and water supplies in areas without municipal services.
- Ensure that the regulation of land development in Enosburgh does not negatively impact the availability of safe and affordable childcare.
- Ensure a safe community that is committed to fostering the health and well-being of all residents.

# POLICIES

- Coordinate the extension and upgrade of water, sewer, and power lines with planned growth of the community.
- Maintain communication and cooperation with the Town of Berkshire to ensure proper land management within the Well Head Protection Area.
- Ensure that individual on-site septic systems and water supplies are sited and installed in a manner that protects public health and the quantity and quality of ground water.
- Where co-location of telecommunications facilities with other towers or structures is not feasible, new structures must be sited in appropriate areas, respecting the integrity of residential areas, aesthetic concerns, and natural resource issues.
- Investigate alternative technologies for wastewater treatment.
- Promote and encourage the development of recreational opportunities for all ages and ensure safe, convenient access to all recreation facilities is provided.
- Ensure regulation of land development does not negatively impact the availability of safe and affordable childcare.
- Provide sufficient space and facilities to carry out essential municipal functions.
- Provide emergency services and law enforcement to protect the health, safety, and property of residents and visitors.
- Encourage participation in the Emergency Subscription Program.
- Encourage patterns of land use, transportation strategies, and street design to promote walking, biking, and access to healthy foods for all.
- When considering future development within the community, identify vacant lots or unutilized spaces where parks, trails, or safe open spaces could be built and used for community gardens, community centers, Farmer's markets, or other shared community spaces.
- Enosburgh will support regional youth substance prevention groups and coalitions that discourage underage substance use.
- The town will support strategies that reduce the stigma associated with addictions and mental health problems.

# **Chapter 8: Transportation Planning**

Transportation planning at the State, Regional, and Local level should have two primary functions. The <u>first purpose</u> is to ensure that people and goods are able to move freely, safely, and efficiently using all modes of transportation. This includes, where applicable, highways, local roads, railroads, airports, bicycle paths, pedestrian routes, ferry systems, and public transit. Transportation efficiency includes consideration of energy use, economic and social costs, and time. People and goods move with the assistance of more than one mode; therefore, transportation planning should consider how the different modes of transportation could complement each other.

The <u>second purpose</u> of transportation planning is to help guide growth in appropriate locations identified through land-use planning. Growth management can be assisted by directing construction or transportation improvements in coordination with local and regional plans into areas favorable for growth and away from environmentally sensitive areas.

Town of Enosburgh and the Enosburg Falls are active participants in the Regional Transportation Advisory Committee (TAC). The TAC serves to advise the Northwest Regional Planning Commission's transportation planning program, acts as a liaison between local communities and the Vermont Agency of Transportation (VTrans), and provides local and regional input regarding transportation issues important to the region

#### History.

The completion of the Missisquoi Valley Railroad in 1871 brought new businesses, homes, and the need for an expanded road system to Enosburg Falls. Depot, Pleasant, Orchard, Church, and Pearl Streets were all added to accommodate the new growth. Historical records clearly demonstrate the way that the quality and location of the transportation systems affects the location, density, and intensity of local land use; however, land use decisions can have and do have dramatic impacts upon the function of the transportation network.

#### Local Roads.

The Enosburgh Transportation System Map 8.1 shows the state and local highways, combined the Town and Village have approximately 77.6 miles of local roads and 9.4 miles of State Highway along Route 105, 108 and 118. Vermont classifies roads into four categories based on the role that a road plays in serving the flow of travel through the road network; Table 8.1 presents the amount of mileage of each category per municipality. Factors such as average speed,

convenience, access and the adjacent land use, and the types of travel a road carries all affect how the roads function and serve the needs of its diverse users.

Table 8.1. Mileage of Highway by Classification in Town and Village							
Miles of Road:	Class 1	Class 2	Class 3	Class 4			
Village	2.4	3.3	4.5	-			
Town	-	17.5	45.8	4.1			



Map 8.1. Enosburgh Transportation System

# Classifying Roads

Class 1	Town	Highways
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Those town highways which form an extension of a state highway route (usually in a downtown area) and which carry a state highway route number. These routes have shared maintenance responsibilities between VTrans (responsible for scheduled surface maintenance or resurfacing and center line pavement markings) and the municipality (responsible for pothole patching, crack filling, crosswalks, and parking).

# Class 2 Town Highways

Those town highways selected as the most important highways (after State roads) in each town. They are generally selected with the purpose of securing trunk lines from town to town and to places that by their nature have more than the normal amount of traffic. Municipalities maintain however VTrans is responsible for line pavement markings.

# Class 3 Town Highways

These make up the majority of local roads. The minimum standard for Class 3 highways states that they must be maintained to a standard where a pleasure car could negotiate them under normal considerations, all seasons of the year. This would include, but not be limited to, sufficient surface and base, adequate drainage, sufficient width, and suitable for maintenance.

# Class 4 Town Highways

Includes all other town highways. Selectboards determine which roads will be Class 4 town highways. These are not required to be maintained by the municipality.

Roadways are also categorized by a functional classification system to describe each type of road. Functional classification organizes the highway network according to the function or role that each highway has to fulfill. These roles include providing for through movements and for access to adjacent properties. These include principal arterial – Interstate, principal arterial – other, minor arterial, major collector, minor collector, and local. Vermont Route 105 is considered a minor arterial and Vermont Route 118 is considered a major collector.

Roadway improvements in the form of paving and widening may be needed in the years to come. The decisions to perform this work should be made by the voters after local officials make recommendations.

# Maintenance of the Local Transportation Network.

In addition to the 76 miles of local highways, the Town and Village are responsible for maintaining a network of bridges and culverts that assist in the conveyance of stormwater runoff and ensure the safe passage of motorists, pedestrians, and other travelers. General maintenance of the local transportation network is the responsibility of the Enosburg Falls Public Works Department and the Town of Enosburgh Highway Department.

The Enosburg Falls Public Works Department has three employees and owns the following equipment:

2000 Elgin Pelican Street Sweeper	2015 International Plow/Dump Truck
2017 <sup>3</sup> / <sub>4</sub> ton Chevy Truck with Dump	2014 John Deere Loader Backhoe
2019 F550 Ford Pick Up Truck	2013 3320 John Deere Tractor (Snow blower/Mower)

There is a replacement fund, which receives yearly allocations for Public Works Department equipment. The Pelican Sweeper may need to be replaced in the next 5 years. The Public Works Department Garage is adequate in terms of space and condition for the near future. The Department is currently developing plans for a new storage facility to replace the Duffy Hill Barn that has been removed as well as a capital budget for equipment replacement.

The Town of Enosburgh Highway Department has four employees and owns the following equipment:

2017 International Dump Truck	2014 International Dump Truck (14 Yd)
2014 Ford F550 4 X 4	2006 John Deere Backhoe 772D Motor
	Grader with 13ft blade
2011 International Dump Truck (14 Yd)	2008 5445 John Deere Bucket Loader (3 cy)
2011 Chipper Bandit (12 in capacity)	2010 John Deere 120 D Excavator
2004 Trailboss (20-ton trailer)	1988 Eager Beaver (Trailer)

The Town Garage was recently expanded in 2010 to meet current needs and it is anticipated to do so in the future.

To guide highway construction and maintenance, VTrans recommends the adoption of "*Town Road and Bridge Standards*". These standards have provisions to ensure investments in town highways are protected with proper drainage, ditching and construction techniques while also improving safety, reducing long-term costs and addressing environmental concerns.

Planning to address future needs and improvements can be facilitated by the development of a municipal capital plan to guide decisions typically over a five-year period. These plans can cover various topics such as detailing community-wide needs and assigning a priority to address them to the scheduling of maintenance and improvements as well as equipment replacement.

#### Traffic.

Traffic flow will vary depending on various factors such as the time of day, the day of the week, the season, the location of the road, and the weather conditions. The major influences on the traffic flow in Enosburgh are local businesses, local civic and social functions, recreational activities, and seasonal activities such as hunting, fishing, skiing, hiking, and foliage viewing. Table 8.2 shows the average annual daily traffic (AADT) count for Enosburgh's major routes. Increases in daily traffic along routes are thought to be attributed to more commuters traveling through area as well as more seasonal traffic traveling to Jay Peak Resort. The Planning Commission also noted that Stonehouse Road and Davis Road are also seeing increases in traffic volume in recent years.

Route	Observation Point	1992 AADT	2002 AADT	2012 AADT	2018 AADT	% Change 1992- 2012	% Change 2002- 2012	% Change 2012- 2018
105	Pearl St, just W of Church St	-	4200*	3800	3800	-	-9.5%↓	0.0%
105	Main St, between Depot St and W Main St	-	7600*	7900**	7300	-	4.0%↑	-8.8%↓
105	Elm St, between Pleasant St and Water Tower Rd	4900	7300	8400**	7600	71.4%↑	15.1%↑	-9.5%↓
105	Sampsonville Rd, between Boston Post Rd and Berkshire TL	3600	-	4300	4700	19.4%↑	-	9.3%↑
108	W Enosburg Rd, between Bakersfield TL and Tyler Branch Rd	1100	1400	1300	1400	18.2%↑	-7.1%↓	7.7%↑
108	W Enosburg Rd, between Tyler Branch Rd and Hayes Rd	1800	2000	1900	2000	5.6%↑	-5.0%↓	5.3%↑
108	Between Hayes Rd and Duffy Hill Rd	2300	2700	2400	2500	4.4%↑	-11.1%↓	4.2%↑
Source: VTrans, AADT 1975-2012 for VT State Highways; VTrans, 2018 (Route Log) AADTs State Highways *Count data from 2004, ** Count data from 2010.								
Table 8.2. A Comparison of Observed Average Annual Daily Traffic (AADT) Counts on Major       Highways in Enosburgh (1992-2018)								
Route	Observation Point	1992 AADT	2002 AADT	2012 AADT	2018 AADT	% Change 1992- 2012	% Change 2002- 2012	% Change 2012- 2018
105	Pearl St, just W of Church St	-	4,200*	3,800	3,800	-	-9.5%↓	0.0%
105	Main St, between Depot St and W Main St	-	7,600*	7,900**	7,300	-	4.0%↑	-8.8%↓
105	Elm St, between Pleasant St and Water Tower Rd	4,900	7,300	8,400**	7,600	71.4%↑	15.1%↑	-9.5%↓

105	Sampsonville Rd, between Boston Post Rd and Berkshire TL	3,600	-	4,300	4,700	19.4%↑	-	9.3%↑
108	W Enosburg Rd, between Bakersfield TL and Tyler Branch Rd	1,100	1,400	1,300	1,400	18.2%↑	-7.1%↓	7.7%↑
108	W Enosburg Rd, between Tyler Branch Rd and Hayes Rd	1,800	2,000	1,900	2,000	5.6%↑	-5.0%↓	5.3%↑
108	Between Hayes Rd and Duffy Hill Rd	2,300	2,700	2,400	2,500	4.4%↑	-11.1%↓	4.2%↑
Source: VTrans, AADT 1975-2012 for VT State Highways; VTrans, 2018 (Route Log) AADTs State Highways *Count data from 2004, ** Count data from 2010.								

# Condition of Roads.

Sufficiency ratings are used by the VTrans to evaluate the State's roadways. The rating is based on three different factors: structural condition, safety, and efficiency of movement. According to the VTrans 2008 Sufficiency Ratings, in Enosburgh sections of Route 105 has sufficiency ratings of poor to bad and Route 108 has sections of roadway with fair to poor ratings. Highways with sufficiency ratings in this range are candidates for repair. State highways are important segments of the transportation system; the municipalities should monitor this information and coordinate with VTrans on condition concerns.

As was noted in the 1993 Village Plan and again in the 2002 Plan, the Enosburg Falls Public Works Department is having difficulty keeping up with maintenance of the Village roads due to increases in traffic flow and lack of adequate funding. The 2007 Village Survey asked respondents to rate the quality of Public Works Department services with 1 being excellent and 5 being poor. While 42% gave the department a rating of 2 out of 5 and 15% a rating of 3 out of 5, 21% rated the Public Works Department at 4 and another 15% at 5. Residents in the 2002 Enosburg Falls Village Survey were asked to grade the quality of Village roads. 88% of those responding to the 2002 survey question said that streets were fair or poor. The results of these surveys clearly indicate that the improvement and maintenance of Village roads should remain a high priority for Village management.

Since this survey, Enosburg Falls was able to complete three paving and improvement projects from 2009-2012 with funding received from a 2005 Federal Transportation Earmark. Improvements were made on Dickinson Avenue, School Street, and Pleasant Street. In 2015, Enosburg Falls received a grant to upgrade and pave Duffy Hill from Island View Park to the Village/Town line. In 2019, the Village paved four roads: Hayes Farm Road, St. Albans Street,

Railroad Street, and Village Drive. In addition to paving projects, the Village repaired and added sidewalk along Pleasant Street in 2016.

#### State and Town Bridges.

In the town road system, the maintenance of the bridges is a tremendous asset to Enosburgh, drawing considerable tourist attention and adding scenic beauty to the area. Enosburgh has four (4) State bridges and eleven (11) Town bridges. The Village completed repairs to the Bridge of Flowers & Light in 2016.

VTrans also uses a sufficiency rating method to evaluate the conditions of the bridges. Bridges are ranked with a numerical score from one to one hundred, with one hundred being the best. A structurally deficient bridge with a rating less than 50.0 is eligible for federal replacement funding; a bridge with a rating of 50.0 to 80.0 is eligible for federal rehabilitation funding. Covered bridges and steel truss bridges often have lower sufficiency ratings even though they may be structurally sound. The lower rating may be due to a bridge's width, low clearance or inability to carry heavy loads. Because covered bridges are a historic asset, they are not held to the same standards as other bridges. A lower sufficiency rating does not necessarily indicate replacement is needed. It should be noted that the town structure B48, is a temporary bridge and is currently in the VTrans Capital Budget and planned for replacement. Table 8.3 is a listing of State and Town bridges and their sufficiency ratings.

Table 8.3. Bridge Sufficiency Ratings for State and Town Structures							
Bridge Owner	Bridge #	Route Carried or Road Name	Location	Feature Crossed	Year Built	Sufficiency Rating	
State	B46	VT 108	4.2 Miles South JCT. VT 105 W	Brook and Cattle Pass	1952	83.2	
State	B47	VT 108	3.3 Miles South JCT. VT 105 W	The Branch	1952	77.4	
State	B50	VT 108	0.2 Miles South JCT. VT 105 W	Missisquoi River	1970	78.6	
State	B48	VT 108	2.6 Miles S JCT. VT 105 W	Tyler Branch	1998	94.4	
Town	B52*	Hopkins Bridge Rd	JCT. W VT 118	Trout River	1998	34.8	
Town	B45	Sand Hill Rd	0.2 Miles To JCT. C3 TH 43	Tyler Branch	1911	19.7	
Town	B12	Boston Post Rd	JCT. VT 105	Missisquoi River	1929	59.2	
Town	B09	Longley Bridge Rd	0.1 Miles To JCT. C2 TH 1	Beaver Meadow Brook	1919	97.9	
Town	B48	Boston Post Rd	JCT. C2 TH 1	Tyler Branch	2014		
Town	B11	Tyler Branch Rd	0.1 Miles To JCT. C2 TH 1	Beaver Meadow Brook	1919	76.2	
Town	B49	Nichols Rd	1.1 Miles To	Beaver Meadow	1948	31.2	

Table 0.3. Druge Sufficiency Ratings for State and Town Structures							
Bridge Owner	Bridge #	Route Carried or Road Name	Location	Feature Crossed	Year Built	Sufficiency Rating	
			JCT. C2 TH 2	Brook			
Town	B50	E Bakersfield	JCT. W CL 3	Tyler Branch	1918	49.6	
		Rd	TH 43				
Town	B51	Tyler Branch	0.5 Miles E JCT.	Tyler Branch	1980	85.9	
		Rd	TH 3				
Town	B10	Duffy Hill Rd	1.3 Miles S JCT.	Tyler Branch	1981	95.6	
			VT 108				
Town	B47	Boston Post	0.1 Miles to	Bogue Branch	1983	99.8	
		Rd	JCT. C3 Th 42				
Source: VTrans Bridge Sufficiency Ratings, *Covered Bridge, originally built in 1875 and rebuilt in							
1998.							

Table 8.3 Bridge Sufficiency Datings for State and Town Structures

# Pedestrian and Bicycle Facilities.

Enosburg Falls has a network of sidewalks throughout the Central Business District and the High-Density Residential neighborhoods, which provide safe and accessible routes for foot traffic throughout the community. Most streets have sidewalks on both sides of the street for particular sections; see the Map 8.2 for a map of sidewalk facilities in Enosburg Falls. There is an annual appropriation voted for sidewalk construction and maintenance, which receives yearly allocations at the Enosburg Falls annual meeting. Recent sidewalk projects include the repair and addition of new sidewalk along Pleasant Street in 2016 and implementing a community supported effort to extend the sidewalk network to the Enosburgh Recreation Fields across from Hannaford's, which is ongoing as of 2019. While the Village continues to work on sidewalk maintenance and construction annually, the Vital Village Master Plan (2019) noted that the condition of many sidewalks is poor.

Bicycle traffic in and around Enosburgh has increased in recent years. It has become a popular seasonal activity locally and in the surrounding areas. Enosburgh has become a favorite destination for both bicycle tours and road riders from Quebec, Canada and other parts of Vermont. On many of the local roads, the mixing of bicycles and auto traffic is potentially very hazardous. Local efforts to develop bicycle and pedestrian paths are currently underway in many communities in Franklin County including Enosburgh.

The Missisquoi Valley Rail Trail crosses Main Street in the center of the Village. This recreation trail spans from St. Albans City to Richford and is open to walkers, runners, cyclists, snowmobilers, cross country skiers and horseback riders. The Trail is part of a larger bicycle network known as the Lake Champlain Bikeways and is linked to a 350-mile route around Lake Champlain. See the Recreational Facilities and Programs section in Chapter 7 for further discussion of the Rail Trail.

The Enosburg Vital Village Project and a walk audit in June of 2019 with the national walkability expert Mark Fenton provided several recommendations to improve pedestrian and

bicycle facilities in the municipality, many of which are included in the recommendations for implementation.

# Complete Streets.

In 2011, Vermont enacted "**Complete Streets**" legislation, mandating that new and renovated paved roads be designed to safely accommodate motorists, bicyclists and pedestrians of all ages and abilities. Roadways that are planned and designed using a Complete Streets approach may include: sidewalks, bike lanes (or wide paved shoulders), comfortable and accessible public transportation stops, frequent and safe crossing opportunities, accessible pedestrian signals, curb extensions, and narrower travel lanes. It is important that all new road projects take a complete street approach to design and implementation.

# Public Transportation.

Local public transportation via buses and vans is provided by Green Mountain Transit (GMT). Residents in the northeastern section of Enosburgh may connect with the fixed route service at locations along VT 105 in Enosburg Falls. GMT also coordinates Medicaid and elderly transportation service. GMT's services are discussed further in Chapter 10 – Energy section of the Plan. Passenger bus service to destinations beyond Franklin County is available on Greyhound Lines from St. Albans.

Presently the nearest rail service for freight is in Richford (Montreal, Maine, and Atlantic Railway) and St. Albans (New England Central Railroad). Amtrak passenger service is available





in St. Albans via a route that travels south to New York City and eventually Washington D.C.

The nearest airport is the Franklin County Airport in Highgate, which supplies local air service. Larger interstate and international flights are available at the Burlington International Airport, Plattsburgh International Airport, and at Mirabel and Trudeau airports in Quebec.

# Specific Transportation Issues.

**Excessive Speed on Orchard Street and Other Streets**. Orchard Street acts as a de facto bypass to Main Street. It is used by cars as an alternate route to avoid congestion in the Central Business District. Excessive speed on Orchard Street as well as other streets is an issue and must be addressed. Excessive speed causes both a safety hazard and undue noise for a residential area. The Planning Commission will work with the Village Trustees in developing programs to slow traffic on Orchard and all other streets, to the posted speed limit.

**Vital Village Master Plan Implementation**. The Vital Village Master Plan (2019) was an extensive community strategic planning project, which resulted in recommendations relating to improving the vibrancy of Main Street and the safety and experience of pedestrians and cyclists. The first steps towards implementing 3 of the top-5 priorities of this plan is a scoping study for streetscape and wayfinding improvements to Main Street, the Missisquoi Valley Rail Trail intersection and Depot Street. The Village secured funds for this study through the Vermont Bicycle and Pedestrian Program and the study should be complete by the end of 2020.



Rendering of a conceptual curb bump-out and other improvements to Main Street from the Vital Village Master Plan.

**Intersection with Route 105 and Hannaford Shopping Center**. The intersection with Route 105, Watertower Road, and the Hannaford Shopping Center is unsignaled. The State of Vermont owns the Route 105 right-of-way and therefore is responsible for improvements. In 2007, the Village petitioned VTrans to evaluate the intersection to determine if it warranted a traffic light; however, VTrans maintains that the intersection does not yet warrant signalization. VTrans did make alternate improvements to the intersection including lowering the speed limit from 40 MPH to 30 MPH, and repainting the road marks on Route 105 and the intersection with Watertower Road. In addition, VTrans has posed the question to Enosburg Falls whether Watertower Road could be straightened to make a "T" at the intersection rather than a "Y" coming onto Route 105; Watertower Road is owned by Enosburg Falls and the village would be required to pay for such an improvement. No decision on this matter has been made.

Goals, Policies and Recommendations.

GOALS

- Provide for a safe, convenient, economic, and energy efficient transportation system that respects the natural environment and utilizes a variety of transportation modes.
- Maintain the physical state of municipal roads and associated infrastructure in good condition.
- Provide appropriate provisions for bicycle and pedestrian use on designated routes, including sidewalks, paths, proper signage and pavement improvements.

#### POLICIES

- Recognize the link between land use and transportation and coordinate transportation improvements to facilitate and complement the desired type, location, density, and timing of local development.
- Maintain good quality, safe local roads and streets, sidewalks, bridges, and equipment needed for their maintenance.
- Promote a safe, convenient, economic, and energy efficient transportation system for all users including public transit options and paths for pedestrians and bicycles.
- Pursue the implementation of "Complete Streets" designs whenever possible.
- Promote modes of transportation and activities that respect the natural environment.
- Maintain the scenic character of Enosburgh's rural byways.
- Support public transit efforts of Green Mountain Transit Agency to increase mobility and access for Enosburgh residents.
### **Chapter 9: Planning for Hazard Resiliency**

Hazard Mitigation is any sustained action that reduces or eliminates long-term risk to people and property from natural and human-caused hazards and their effects. Communities can engage in opportunities to identify mitigation strategies and measures during all phases of Emergency Planning including Mitigation, Preparedness, Response and Recovery. Hazards may not be eliminated, but it is possible to determine what the hazards are, where the hazards are most severe and identify local actions that can be taken to reduce the severity of the hazard.

Hazard Mitigations Strategies and Measures **alter** the hazard by eliminating or reducing the frequency of occurrence, **avert** the hazard by redirecting the impact by means of a structure or land treatment, **adapt** to the hazard by modifying structures or standards or **avoid** the hazard by stopping or limiting development and could include projects such as:

- Flood-proofing structures
- Tying down propane/fuel tanks in flood-prone areas
- Identifying & modifying high traffic incident locations and routes
- Ensuring adequate water supply
- Elevating structures or utilities above flood levels
- Identifying & upgrading undersized culverts
- Proactive land use planning for floodplains and other flood-prone areas
- Proper road maintenance and construction
- Ensuring critical facilities are safely located
- Buyout & relocation of structures in harm's way
- Establish & enforce appropriate building codes
- Public information

Both the Town of Enosburgh and the Village of Enosburg Falls are actively engaged in hazard mitigation planning; both communities are represented on Local Emergency Planning Committee District 4 serving Franklin County and are members of the Franklin County International Firefighters Association Mutual Aid. Additionally, the Town of Enosburgh adopted a Local Hazard Mitigation Plan (LHMP) on March 17, 2008 that evaluates potential risk to the community and strategies that address those risks. The LHMP evaluated just those natural and human made hazards that are likely to affect the community. The following are a list of hazards that have high to moderate risk for the community, including:

- Flooding
- Fluvial erosion/landslide
- High Winds
- Structure Fire
- Winter Storm

#### Rising Waters.

Enosburgh lies within the Missisquoi River watershed and has the Missisquoi River running through the northwest section of the Town and Village (see Map 9.1). The Tyler Branch, one of Missisquoi's tributaries, flows through the southwestern part of the community and flows into Missisquoi in the neighboring Town of Sheldon.

Flooding has been identified as the worst natural hazard within the community. The Missisquoi River and many of its tributaries flood in the spring of each year when snow melts and the spring rains cause them to overflow their banks. Ice jams also cause flooding on the Missisquoi, contributing to field and bank erosion. Enosburgh's LHMP lists the history of flood events in the community. Based on the USGS data on the Missisquoi River, several flood events greater than the 25-year flood have occurred over the last 20 years; a 25-year flood has a 4% chance of being exceeded in any one year.



Flooding is a natural occurrence and happens when water rises and inundates the adjacent lowlying land. Residents of every town should be aware of the power inherent in a flood. Proper management should be used to ensure that critical floodplain areas are being used appropriately. Development within floodplains poses significant risks and should generally be avoided. River channels and floodplains function as a single hydrologic unit, periodically transferring floodwaters and sediment from one to the other. Appropriate uses of floodplains are those that can accommodate this cycle and allow for areas where the rivers can access the floodplain during high flows. Examples of uses that are appropriate to floodplains include agriculture, open space, and recreation.

#### Structures in Floodplain.

The Federal Emergency Management Agency (FEMA) provides flood insurance under the National Flood Insurance Program (NFIP). In order for property owners to participate in the NFIP, FEMA requires that communities adopt flood hazard regulations. Owners of buildings within the designated special flood hazard areas (SFHA) are required to carry flood insurance in order to get a federally backed mortgage. Both the Town of Enosburgh and the Village of Enosburg Falls have adopted land use regulations for flood hazard areas in order to protect the health, safety, and welfare of its residents and to allow the community to participate in the National Flood Hazard Insurance Program. As of September 2013, property owners in the Town of Enosburgh have 4 flood insurance policies through the NFIP covering \$879,200 and 3 flood insurance policies covering \$557,000 in value are within the Village of Enosburg Falls. Currently there are four policies in force for structures in the Special Flood Hazard Area. Since the community participates in the NFIP, flood insurance is available to any structure in town regardless of previous losses. Insurance information is available at www.floodsmart.gov.

It is important to note that the existing Flood Insurance Rate Maps (FIRMs) are dated January 2, 1981 and Flood Insurance Study was published in December 1979. While this information is the best available, the hydrology that these maps are based on has not been updated since the study in 1979 and therefore does not account for shifts in the river location or effects of development since 1979 in these areas. The FIRMs were digitized by the Northwest Regional Planning commission in 1999 to assist in planning efforts and are used to determine approximate locations. The digital version is not used for regulatory rulings.





There are currently twenty-three structures that reside within the Special Flood Hazard Area (Zone A or 100-year floodplain) based on a GIS overlay analysis using e-911 structure locations (December 2012) and the digitized 1981 Flood Insurance Rate Maps. These structures have a 1% change of flooding. The structures include one multi-family dwelling, four mobile homes, one commercial property and seventeen single-family dwellings. Any mortgages, grants, or loans (including disaster aid) for a structure in the Special Flood Hazard Area must secure flood insurance.

Additionally, seven structures are identified to be within the extent of the 0.2% annual chance flood hazard (Zone B or 500-year floodplain). These include one camp, two industrial sites, and four single-family dwellings. One of the industrial sites is a village owned building on Village Drive. Federal capital funds may not be invested in facilities located within the 0.2% and 1% annual chance flood hazard areas.

Structures located within Zones A and B represents 2% of all structures in the community. The utility of these facilities before, during, or after flooding may be impaired therefore Enosburgh should identify the impact to community services should these structures be at risk from flooding.

#### Fluvial Erosion in the River Corridor.

Fluvial erosion, erosion caused by the lateral and vertical movement of streams and rivers, and landslides are becoming more common within the Northwestern region of Vermont. The VT Department of Environmental Conservation recommends that the community identify *River Corridors*, or the area along the larger tributaries and rivers, that are susceptible to

#### What is a River Corridor?

Rivers are very dynamic and have the ability to change course and create new channels or widen the existing channel. A river corridor includes lands adjacent to and including the channel of a river. A corridor defines the land area where the river will move into overtime as it naturally changes its course.

stream channel adjustment in order to reduce the risk of erosion damage. Historic land uses along the river and its streams including floodplain encroachments and vegetative debris removal have increased the risk of erosion and landslides.

In 2005, a Phase 2 Stream Geomorphic Assessment in the Tyler Branch watershed was performed to map the river corridor and infrastructure (bridges and culverts) were assessed to identify those that are at risk from river adjustment. The assessment noted that nearly all of the reaches have a sensitivity of high to very high with the potential for further widening of the stream channel and bank erosion; because of this many areas of the river have layered the bank with large rock to limit the potential areas of bank erosion. This method, called rip-rap, can increase the speed of the water which also adds to the strength of the flow and increasing erosion potential in unprotected areas.

The geomorphic assessment recommends that areas with limited riparian buffer, those most sensitive to further widening, should be targeted for buffer reestablishment and/or active bank

stabilization to limit potential property loss from erosion. Also, bridges that are slightly undersized act as local channel and floodplain constrictions and should be upgraded. Since 2005, the Town and the Missisquoi River Basin Association have been considering restoration and corridor protection projects identified within the assessment.

Infrastructure placed too close to streams and rivers is particularly exposed to damage from flash flooding, bank failure, and stream channel dynamics. Fifteen structures fall within the River Corridor along the Tyler Branch including one camp, one government facility, three mobile homes, and ten single-family dwellings. The Town Highway system within the watershed has experienced many erosion events during periods of high precipitation and rapid run-off along roads within proximity of Tyler Branch and its tributaries including: TH-30 along Bogue Brook; TH-1 along Tyler Branch; TH-1 and TH-7 along Beaver Meadow Brook; VT 108 along The Branch. Erosion concerns are also present along the Missisquoi River, one problem areas is near the Dairy Center along 105 which has riprap along one bank.

#### Past Flood Damage

On July 14–16, 1997, flooding in northern Vermont caused severe local damage and resulted in a Presidential disaster declaration (FEMA-1184-DR-VT). The erosion and deposition were significant at numerous locations. Local officials and residents were concerned that the accumulation of sand, gravel, and cobbles in stream channels magnified the severe flooding. Currently, Vermont and Federal stream management policies restrict the removal of these materials. The flood of 1997 exacerbated an already serious river erosion problem. Historic land use changes, channel management practices, and floods had resulted in an extremely unstable river system.

Northern Vermont experienced record rainfalls during the spring of 2011 (DR1995 and DR4043). High precipitation combined with snowmelt resulted in prolonged saturated conditions and significantly elevated and/or perched water tables. The saturated ground and high water table conditions contributed to slope instability and landslides at several locations throughout northern Vermont.

There are many areas throughout Town where stream bank erosion is causing in – stream sedimentation. It is noted in the 2007 Geomorphic Assessment of Rock River and tributaries that stormwater runoff and sedimentation would be decreased following road maintenance practices such as stabilization of road surfaces (different gravel materials), improvement of roadside ditches (excavation, stone lining and/or seeding and mulching), alternative grading practices (turnouts, check-basins); re-orientation of culvert crossings; and protection of culvert headers. In agricultural settings, increased flows from drainage tiles, ditches and erosional gullies can be addressed through design and retrofitting of tile networks to provide for energy dissipation at tile outlets; gully stabilization; and consideration of crop rotation or alternative farming practices that reduce the need for drainage tiles.



Map 9.1. Floodplain and Fluvial Erosion Risk in Enosburgh

The Town of Enosburgh and Enosburg Falls Village have mapped fluvial erosion hazards (see Map 9.1). Fluvial erosion and landslide hazard maps could be used as a tool for communities to guide development away from areas that pose a high risk of erosion and landslides. Additionally, to mitigate the rates of erosion, riparian buffers of woody vegetation could be cultivated along stream banks. Selective armoring of the lower portions of stream banks would very likely be needed until a dense root system of vegetation develops along banks. Currently, several working farms within Town utilize buffer strips to mitigate erosion along streams. The town has incorporated defined buffers into their development regulations that protect a distance around rivers and ponds from development.

#### High Winds.

High winds can occur anytime and in any area of Enosburgh during the year as pressure gradients move through the area. The area has experienced a variety of high winds from storm systems that track from eastern New York and Ontario and across Lake Champlain. Enosburgh is far inland and is unlikely to receive a direct hit from a hurricane, however high winds and hail storms are typically an accompanying hazard. Localized high wind events have caused damage to sugarbushes in the area.

Power outages may occur resulting in significant loss of business as well as threatening public safety. Cleaning up debris following high wind events can be costly depending on the severity of the event. While there have been several tropical storms in the last decade, high winds have not led to significant reported damages in the community.

#### Structure Fires.

Structure fires can occur anywhere and be a threat whether it is in the village center or the rural countryside. Agriculture emergencies, such as barn fires, pose a unique risk for first responders. Animal behavior and barn fire logistics must be considered during response and many agricultural buildings store a variety of hazardous materials. Structures that are relatively close raise the risk for multiple structure fire.

- Since 2000 there have been three notable fires that have impacted public facilities:
- November 5, 2007 A fire at the Historic Dairy Center complex on Route 105 destroyed the main office, two motel units, and damaged other facilities. The cause of the fire was not determined and damages were estimated to be \$165,000.
- In 2005, a fire occurred in the Depatie and Abbott blocks of the Village Center. The fire completely destroyed two blocks of retail, business and housing; this area has since been rebuilt.
- In 2000, a fire destroyed the Dairy Center's banquet and dance hall. A wood stove caused the blaze. There was an estimated \$70,000 in damages.

The impact of this type of incident would primarily be on the commercial sector with a smaller impact on housing. Newer public facilities, such as the Enosburg Public Safety building, are subject to fire safety building codes and are designed with heat/smoke detection systems.

Estimated loss due to fire damage on 5 structures annually using median home values is \$412,500. This loss estimate does not include building contents nor losses to commercial or lodging sites. Older historic buildings, commercial sites and residences that lack fire alarms and sprinkler systems are at greater risk for damages. The Fire Department has noted the concern of adequate water capacity in the Village; this concern should be taken into consideration for planning and response purposes.

#### Winter Storm.

Winter storms bring snow, ice and freezing temperatures to the area and occur on annual basis. Winter storms affect all of Enosburgh and generally cause disruptions to public and private services. The primary impacts of a storm typically include the disruption to transportation networks, school closings and occasionally telecommunications and power outages. Vulnerable populations such as the elderly, those dependent on medical equipment and specialized health or physical care are at risk to winter storms. Also at risk are farms and associated structures and livestock.

Since 2000 there have been four major events:

- March 5<sup>th</sup> & 6th, 2001 Enosburgh received 16" of snow. The storm began early Monday morning with a brief burst of snow then transitioned during the midday hours to intermittent light snow, sleet, freezing rain and rain. The storm developed into a nor'easter during the afternoon and continued through the evening. Damage estimates for cleanup are unknown.
- October 25, 2005 A rare autumn Nor'easter struck Franklin County fed by the remnants of Hurricane Wilma. There were reported snowfall amounts in the County varied from 6 to 14 inches. Trees still laden with fall foliage were downed due to the weight of heavy, wet snow. There were many reports of snapped power lines from downed trees and branches. Many homes serviced by Vermont Electric Cooperative were without power for several days.
- December 1-5, 2010 Severe winter storms during this period received a Presidential disaster declaration (DR 1951) to supplement state and local recovery efforts. FEMA's public assistance funds were made available to Franklin and other affected counties.
- December 20-26, 2013 (DR-4163) A wide-spread low-pressure system that brought snow and freezing rain through Ontario, Quebec, and Northern New England. These areas experienced an ice storm that brought wide-spread power outages. Many Towns throughout Franklin County were affected by the ice storm. Vermont Electric Cooperative responded to over 60,000 customer outages during the week and estimated costs of restoring power at \$7,400,000. Residents were without power for several days.

Severe winter storms are accompanied by strong winds creating blizzard conditions with blinding wind-driven snow, severe drifting, and dangerous wind chill. Strong winds with these intense storms and cold fronts can knock down trees, utility poles, and power lines. Extreme

cold often accompanies a severe winter storm or is left in its wake. Prolonged exposure to the cold can cause frostbite or hypothermia and become life-threatening. Infants and elderly people are most susceptible. Severe winter storms can bring heavy accumulations of ice which can down trees, electrical wires, telephone poles and lines, and communication towers. Communications and power can be disrupted for days while utility companies work to repair the extensive damage. Even small accumulations of ice may cause extreme hazards along roadways.

#### Risk from Community Infrastructure - Dams.

The Village of Enosburg Falls Electric Department owns and operates two hydroelectric dams on the Missisquoi River. The Village of Enosburg Falls Electric Department has conducted a safety analysis on the dam which considers downstream impacts to a dam breach or failure. Projected impacts are minimal according to the analysis. Any future dam safety analysis should be reviewed to ensure that the municipality implements any recommendations for local mitigation actions.

Major in-stream infrastructure like dams, even small dams on small streams, have significant impacts on fish and other aquatic life and can lead to stream instability by disrupting the natural downstream transport of sediment.

#### Past and Future Mitigation Actions.

The following sites were identified in the LHMP has problematic areas and have since been addressed:

- Culvert on Town Highway (TH)-1 (Perley Road), 0.5 mile North of the intersection with TH-11
- Bridge 48 on TH-2 (Boston Post Road)
- Bridge 9 on TH-7 (Longley Bridge Road)
- Bridge 49 on TH-1 (Nichols Road)
- Concrete bridge on TH-30 (Bogue Road)

The following sites have been identified as repetitive problems or maybe at risk in future events. These areas have been included in the LHMP update:

- Box culvert on unnamed tributary of Tyler Branch on TH-1 (Tyler Branch Road), 0.5 mi from VT 108
- Road reconstruction on TH19 (Tyler Branch Road) and TH18 (Duffy Hill Road)
- Bridge 45 on TH-42 (Sand Hill Road)
- Bridge 50 on TH-2 (VT 108) over the Missisquoi River
- Box culvert on TH22 (Nichols Road)

#### Goals, Policies and Recommendations.

#### GOALS:

- Encourage and foster an all hazards disaster resilient community.
- Reduce the loss of life and injuries that result from disasters.
- Reduce damages to public infrastructure resulting from all hazards events through hazard mitigation planning and project implementation.

#### **POLICIES:**

- Encourage flood emergency preparedness and response planning.
- Encourage the protection and restoration of floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion.
- Continue to implement the Local Hazard Mitigation Plan and Emergency Operations Plans in conjunction with the NRPC and others.
- Participate in the Franklin County Mutual Aid Agreement.
- Resiliency measures will be compatible with natural features, including floodplains, river corridors, land adjacent to streams, wetlands, and upland forests, historic resources; character of neighborhoods; and the capacity of the community to implement them.

#### Enhanced Energy Plan.

The intent of this section is to meet the municipal determination standards for enhanced energy planning enabled in 24 V.S.A. 4352. The purpose of enhanced energy planning is to further regional and state energy goals, including the goal of having 90% of energy used in Vermont come from renewable sources by 2050 (90 x 50 goal), and the following:

- A. Vermont's greenhouse gas reduction goals under 10 V.S.A. § 578(a);
- B. Vermont's 25 by 25 goal for renewable energy under 10 V.S.A. § 580;
- C. Vermont's building efficiency goals under 10 V.S.A. § 581;
- D. State energy policy under 30 V.S.A. § 202a and the recommendations for regional and municipal energy planning pertaining to the efficient use of energy and the siting and development of renewable energy resources contained in the State energy plans adopted pursuant to 30 V.S.A. §§ 202 and 202b (State energy plans); and
- E. The distributed renewable generation and energy transformation categories of resources to meet the requirements of the Renewable Energy Standard under 30 V.S.A. §§ 8004 and 8005; and

A positive determination of compliance with the requirements of enhanced energy planning, as provided by the Regional Planning Commission, will enable Enosburgh to achieve "substantial deference" instead of "due consideration" in Section 248 applications for energy generation facilities (ex. wind facilities, solar facilities, hydro facilities, etc.) under Criteria (b)(1)-Orderly Development. In short, this means that Enosburgh will have a greater "say" in Certificate of Public Good proceedings before the Vermont Public Service Board about where these facilities should or should not be located in the community.

To receive a positive determination of energy compliance, an enhanced energy plan must be duly adopted, regionally approved, and must contain the following information:

- A. An analysis of current energy resources, needs, scarcities, costs, and problems.
- B. Targets for future energy use and generation.
- C. "Pathways," or implementation actions, to help the municipality achieve the established targets.
- D. Mapping to help guide the conversation about the siting of renewables.

This chapter will include the required analysis, targets, and mapping. The "pathways," or actions, have been included in the implementation section of the municipal plan.

#### Energy Resources, Needs, Scarcities, Costs and Problems.

The following subsection reviews each energy sector of energy use (thermal, transportation, electricity) and generation in Enosburgh.

#### Thermal Energy

An estimate of current residential thermal energy demand in Enosburgh, based on data from the American Community Survey (ACS 2011-2015), is shown in Table 7.1. This data represents the

homes primary fuel source for home heating and does not account for backup or secondary home heating fuel sources. The data shows that 47.6% of households in Enosburgh depend on fuel oil for home heating as their primary fuel source. Fuel oil and wood sources are estimated to heat almost 75% of homes in Enosburgh. There is access to natural gas in Enosburg Falls, but only 127 households use this as their primary hearting source.

Fuel Source	Enosburgh Households (ACS 2011-2015)	Enosburgh % of Households	Enosburgh - Households Square Footage Heated	BTU (in Billions)
Natural	127	10.8%	191,120	11
Gas				
Propane	128	10.9%	202,176	12
Electricity	16	1.4%	28,352	2
Fuel Oil	557	47.6%	881,008	53
Coal	7	0.6%	8,400	1
Wood	316	27.0%	572,800	34
Solar	0	0.0%	0	0
Other	20	1.7%	31,744	2
No Fuel	0	0.0%	0	0
Total	1171	100.0%	1,915,600	115

 Table 10.1. Current Enosburgh Residential Thermal Energy Use

Estimates for commercial and industrial thermal energy use are more difficult to calculate. An estimate of total commercial energy use (thermal and electricity) is provided in Table 7.2. Based on data from the Vermont Department of Labor (VT DOL) and the Vermont Department of Public Service (VT DPS). According to NRPC, it is assumed that the majority of this energy use, 65 billion BTU per year, is likely to be for thermal energy needs.

Table 10.2.	. Current	Enosburgh	Commercial	Energy	Use
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	Commercial	Estimated	Estimated
	Establishment	<b>Thermal Energy</b>	Thermal
	S	BTUs	Energy BTUs
	in Enosburgh	per Commercial	by Commercial
	(VT DOL)	Establishment/yea	Establishments
		r	in
		(in Billions) (VT	Enosburgh/yea
		DPS)	r (in Billions)
Municipal Commercial Energy	89	0.725	65
Use			

#### Electricity Use

An estimate of current electricity use in Enosburgh is shown in Table 7.3. Enosburgh electricity use has increased from 26 million kWh in 2014 to about 26.7 million kWh in 2016. However, during this time average annual residential usage per household dropped from 8,704 kWh to

8,644 kWh between 2014 and 2016. Much of the increased growth in total kWh in Enosburgh between 2014 and 2016 has come from increased commercial and industrial users.

The Village of Enosburgh Falls Electric Department is the electric utility that serves the vast majority of the village and town. Vermont Electric Coop is the electricity utility serves very limited portions of Enosburgh near East Berkshire and Montgomery.

Use Sector	Current Electricity Use in Enosburgh - 2016 (Efficiency Vermont)
Residential (kWh)	13,195,444
Commercial and Industrial (kWh)	13,597,360
Total (kWh)	26,792,804

#### Table 10.3. Current Enosburgh Electricity Use

# Table 10.4. Current EnosburghTransportation Energy Use

1 Ov	
Transportation Data	Enosburgh
	Data
Total # of Passenger	2,090
Vehicles (ACS 2011-2015)	
Average Miles per Vehicle	11,356
(VTrans)	
<b>Total Miles Traveled</b>	23,734,040
Realized MPG (2013 -	18.6
VTrans 2015 Energy	
Profile)	
Total Gallons Use per	1,276,024
Year	
Transportation BTUs	154
(Billion)	
Average Cost per Gallon	2.31
of Gasoline in 2016	
(NRPC)	
Gasoline Cost per Year	2,947,615

#### **Transportation**

Table 7.4 contains an estimate of transportation energy use in Enosburgh. It's estimated that Enosburgh residents drive approximately 23.7 million miles per year and spend about \$2.9 million on transportation fuel expenses a year. This calculation does not include expense for commercially owned and operated vehicles.

As of January 2016, data from the Vermont Department of Motor Vehicles notes that there are between 1 and 4 electric vehicles within the Enosburgh zip code (which includes parts of Berkshire, Sheldon, and Bakersfield).

#### Generation

There is currently 2.29 MW of electricity generation capacity from renewable generation facilities in Enosburgh. This capacity results in approximately 7,372 MWh of electricity generation per year. This is roughly equal to the annual electricity use of about 1,100 households in

Vermont based on information available from the U.S. Energy Information Administration (558 kWh per VT household per month).

Table 7.5 organizes information about existing generation in Enosburgh by type of facility. The Existing Generation map at the end of the chapter shows the location of all electricity generators in Enosburgh with a capacity greater than 15 kW.

Enosburg Falls, along with the western and northern parts of Enosburgh along VT Route 105 and VT Route 118, generally have good access to electricity transmission lines and three-phase

distribution lines. These types of lines are used to transmit large quantities of electricity and are needed to serve large industrial users and commercial centers. Access to this type of infrastructure may make development of renewable energy facilities easier and more costeffective in than in other surrounding communities with less existing grid infrastructure. The Transmission Infrastructure Map at the end of the chapter shows the electricity transmission and three-phase distribution infrastructure in Enosburgh. Access to renewable generation resources,

<u>Generation</u> <u>Type</u>	MW	MWh
Solar	0.29	355.66
Wind	0.00	8.58
Hydro	2.00	7,008.00
Biomass	0.00	0.00
Other	0.00	0.00
Total Existing Generation	2.29	7,372.24

<b>Table 10.5.</b>	Existing	Renewable
Generation	in Enosb	urgh

such as solar and wind, will be addressed below in the mapping section.

#### Targets for Energy Use.

Northwest Regional Planning Commission worked with the Vermont Energy Investment Corporation (VEIC) and the Vermont Department of Public Service in 2016 to develop regional targets for future energy use and generation to meet the State of Vermont's 90 x 50 goal. The targets represent only one scenario that would meet this goal. There may be many different ways that would also enable Vermont to achieve the 90 x 50 goal. For more information about the regional targets, please see the Northwest Regional Energy Plan (www.nrpcvt.com).

Tables 7.6, 7.7 and 7.8 show the targets for future energy use for Enosburgh by sector (totals are

cumulative). These municipal targets are based on regional targets that have been disaggregated.

The thermal target for Enosburgh in 2050 is to have 85% of structures be heated by renewable sources. Much of this transition is likely to come in the form of electric heat pumps as the primary heating source for single family homes as the technology becomes more readily available and affordable. The target also relies on wood heating being a continued source of residential heating. There are also high targets for the weatherization of residential households and commercial structures (78% and 73% respectively in 2050).

Table	10.6.	Thermal	Targets
-------	-------	---------	---------

Thermal Targets	2025	2035	2050
Percent of Total Heating Energy From	44.3%	57.3%	85.0%
<b>Renewable Sources - Heating (BTUs)</b>			
New Efficient Wood Heat Systems (in units)	6	16	59
New Heat Pumps (in units)	122	293	578
Percentage of municipal households to be weatherized	5%	16%	78%
Percentage of commercial establishments to be weatherized	25%	49%	73%

The transportation energy targets for Enosburgh are similarly ambitious. By 2050, almost 91.7% of transportation energy will need to come from renewable sources. This will primarily be done through conversion to electric vehicles from fossil fuel vehicles for light-duty, passenger

vehicles. However, it will also mean conversion of heavy-duty vehicles from diesel to biodiesel sources. The biodiesel technology and infrastructure will certainly need to advance and evolve in order to meet this target.

Transportation Targets	2025	2035	2050
Percent of Total Transportation Energy from	12.4%	35.7%	91.7%
<b>Renewable Sources - Transportation (BTUs)</b>			
Electric Vehicles	183	1369	3258
Biodiesel Vehicles	493	984	1906
Biodiesel Vehicles	493	984	1906

#### **Table 10.7. Transportation Targets**

Targets for electricity use are more complex to interpret. Electricity use is targeted to double by 2050 (Table 7.8). This will likely be driven by conversions to electric heat pumps and electric vehicles. These consumer changes will cause electricity use to grow. At the same time, total energy use (energy, not electricity) will become more efficient. This is because electric cars and electric heating sources are more efficient than using other energy sources, such as fossil fuels. So while the doubling of electricity use is the target, then intent is to continue to work towards electricity conservation while becoming more reliant on electricity for transportation and heating. To truly assess whether or not Enosburgh has achieved this target, it will need to assess both parts of the targets, conservation and conversion, in the future.

#### Table 10.8. Electricity Targets

Electricity Targets	2025	2035	2050
Increased Efficiency and Conservation (BTUs)	25.2%	48.3%	100.7%

#### Targets for Energy Generation.

Table 7.9 shows the electricity generation targets for Enosburgh in 2025, 2035, and 2050. All new wind, solar, hydro, and biomass electricity generation sites will further progress towards achieving the generation targets (in MWh). Given the difficulty of developing additional hydro generation, and the constraints upon wind development, it is likely that solar generation will need to be a substantial component of meeting these generation targets. Meeting the generation target (21,783.1 MWh) is about 3 times the current generation capacity (7,372.24 MWh) within the Town of Enosburgh.

#### **Table 10.9. Generation Targets**

<b>Renewable Generation Targets</b>	2025	2035	2050
<b>Total Renewable Generation Target (in MWh)</b>	7,188.4	14,376.8	21,783.1

Enosburgh has sufficient land to meet the above generation targets based on mapping completed by NRPC. Based on mapping and calculations completed by NRPC, Enosburgh has access to the generation capacity outlined in Table 7.10. This generation capacity was calculated using the "base" layers for solar and wind. For an explanation of what constitutes a "base" layer, please see the mapping subsection below.

Resource	MW	MWh
Rooftop Solar	2	1,982
Ground-mounted Solar	461	565,299
Wind	176	539,831
Hydro	0.004	14
Biomass and Methane	0	0
Other	0	0
<b>Total Renewable Generation Potential</b>	639	1,107,125

**Table 10.10. Renewable Generation Potential** 

Enosburgh supports NRPC's position regarding "commercial" and "industrial" wind facilities. The NRPC Regional Plan finds that the construction of new "industrial" or "commercial" wind facilities within the region does not conform to the Regional Plan (NRPC considers any wind facility with a tower height (excluding blades) in excess of 100 feet tall to be considered an "industrial" or "commercial" wind facility).

Energy potential from biomass and methane sources is not estimated. This is due to a variety of factors including insufficient information on which to create estimates. Enosburgh encourages the use of these sources for electricity and thermal generation, especially on farms.

#### Figure 10.2. Ground Mounted Solar Potential



#### Figure 10.1. Rooftop Solar Potential

Rooftop solar was estimated by using methods suggested by the Vermont Department of Public Service. The methodology estimates that 25% of residential and commercial structures in Enosburgh could be suitable for rooftop solar generation. This results in 293 residential structures and 22 commercial structures in Enosburgh. It is then estimated that the average residential rooftop system is 4 kW in size and the average commercial rooftop system is 20 kW in size. The resulting estimated generation capacity is 1.62 MW of solar generation.

#### Mapping Energy Resources and Constraints.

Enosburgh has incorporated maps provided to them by NRPC in Appendix D. These maps show data as required by the Department of Public Service Determination Standards, including access

to energy resources and constraints to renewable development, and are a required element of enhanced energy planning. All maps may be found at the end of this section.

The intent of the maps is to generally show those areas that may be good locations, or may be inappropriate locations, for future renewable generation facilities. However, it is important to note that the maps are a planning tool and do not precisely indicate locations where siting a facility is necessarily acceptable. When a generation facility is proposed, it is the applicant's responsibility to verity the presence of all constraints on site as a part of the application.

#### Mapping Methodology.

Spatial data showing the location of energy resources formed the basis of the maps developed by NRPC. This is the data that shows where there is solar, wind, hydro, and biomass "potential."

"Known" and "possible" constraints were subsequently identified on the maps. Known constraints are conservation resources that shall be protected from all future development of renewable generation facilities. Possible constraints are conservation resources that shall be protected, to some extent, from the development of renewable generation facilities. The presence of possible constraints on land does not necessarily impede the siting of renewable generation facilities on a site. Siting in these locations could occur if impacts to the affected possible constraints are mitigated, preferably on-site.

A full list of known and possible constraints included on the maps is located in Table 7.11. The known constraints and possible constraints used to create the maps include constraints that are required per the State Determination Standards from the Department of Public Service and regional constraints that were selected by NRPC. The Conservation Districts for both Enosburgh and Enosburg Falls were included as regional known constraints.

#### Solar and Wind.

The solar and wind maps show both "base" and "prime" areas. Base areas are areas with generation potential, yet may contain possible constraints. Prime areas are areas that have generation potential that do not contain known or possible constraints. Areas that do not contain generation potential, and areas that contain a known constraint, are shown as white space on the map.

The solar map indicates a general concentration of base and prime solar areas around the northern portion of VT Route 105, and in the vicinity of Enosburgh Center. Enosburgh has identified the following preferred locations for solar generation facilities: rooftops, parking lots, and landfills. Brownfield sites located outside of the village are also considered preferred locations.

There generally isn't much land available in Enosburgh that has base and prime wind resources. These areas are generally concentrated west of Enosburgh Center and on the lower western slope of Enosburgh Mountain.

#### Hydro and Biomass.

The biomass map is somewhat similar to the solar and wind maps. The biomass map also displays "base" and "prime" areas. However, these categories are not necessarily indicative of

generation. They instead indicate areas of contiguous forest that may be used for the harvesting of woody biomass for use in either thermal or electric generation.

The hydro map is unique from the other types of generation maps. It shows existing dam sites used for electricity generation. It also shows existing dam sites that are not used for electricity generation, but could be retrofitted to provide generation capacity. Data about these dams comes from a study commissioned by the Vermont Agency of Natural Resources. The hydro map also shows some known and possible constraints that could impact the redevelopment of some dam sites.

Enosburgh has one existing dam site. The dam, owned by the Village of Enosburg Falls, is located on the Missisquoi River and currently generates electricity for the Village Electric Department.

#### Conclusion.

Achieving the 90 x 50 goal, and the other energy goals in state statute, will be difficult. Enosburgh is committed to playing its part in working towards accomplishing these goals and in creating a more sustainable, less costly, and more secure energy future.

#### Goals, Policies and Recommendations.

#### GOALS:

- > Plan for increased electric demand with the support of Efficiency Vermont.
- Reduce annual fuel needs and fuel costs for heating structures, to foster the transition from non-renewable fuel sources to renewable fuel sources, and to maximize the weatherization of residential households and commercial establishments.
- Hold vehicle miles traveled per capita to 2011 levels through reducing the amount of single occupancy vehicle (SOV) commute trips, increasing the amount of pedestrian and bicycle commute trips, and increasing public transit ridership.
- > Focus growth within and adjacent to the village.

#### **POLICIES:**

- Enosburgh supports energy conservation efforts and the efficient use of energy across all sectors.
- Enosburgh supports the reduction of transportation energy demand, reduction of singleoccupancy vehicle use, and the transition to renewable and lower-emission energy sources for transportation.
- Enosburgh supports patterns and densities of concentrated development that result in the conservation of energy. This includes support of public transit connections from Enosburgh to other parts of the region and considering access to public transit when reviewing Act 250 applications.
- Enosburgh supports the development and siting of renewable energy resources in the Town that are in conformance with the goals, strategies, and mapping outlined in this plan.

Development of generation in identified preferred locations shall be favored over the development of other sites.

- Enosburgh supports the conversion of fossil fuel heating to advanced wood heating systems or electric heat pumps.
- Support local farms and the local food system.

## **Chapter 11: Economy**

#### Introduction.

Enosburgh's geography as a central location in Franklin County and its distance from larger towns and cities has led to its historic and current role as a regional center. The village is characterized by a traditional Main Street with a rich historic legacy consisting of a variety of brick, blockstyle buildings intermixed with historic New England architectural styles. Retail is the dominant sector of the local economy, but agriculture remains important.





Main Street Retail Establishments in Enosburg Falls.

Workers coming to Enosburgh for

employment largely pull from Franklin County. Figure 11.1 depicts the communities where the majority (66%) of the workers employed in Enosburgh live. The distribution of workplaces for Enosburgh residents is far more diffuse geographically. Notably, 19 percent of Enosburgh's workforce commutes to the Burlington area, while 17 percent commutes to St. Albans.

Enosburgh variety has a of businesses that serve both local needs and the needs of its surrounding areas. A complete listing of the sectors and the number of persons employed by each can be found in the Figure 2.6. According to a 2019 market assessment completed Doug Kennedy Advisors, there are approximately 98 businesses in the village. Retail accounts for 27 percent of all business establishments and 23 percent of total employment.

One of the bigger employers in

## Figure 11.1. Enosburgh Commuter Shed



Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics. 2011.

Enosburgh is Franklin Foods, the cheese processing plant which employs over one hundred persons. Two of the service-orientated businesses that contribute significantly to the local economy are in the health care field and transportation. In the health care services sector are the

Riverbend and Brownway nursing and boarding care facilities. There is also the Northern Tier Center for Health (NOTCH) health center, which houses several health care professionals and practitioners, as well as Northwestern Pediatrics, Cold Hollow Practice and Franklin County Home Health Agency.

The transportation sector has a considerable impact on the local economy. There are four companies in Enosburgh which together provide nearly two-hundred full-time and part-time positions. Most of these companies are involved in the hauling of bulk milk. Some provide miscellaneous trucking services and one provides school busing for the districts in eastern and central Franklin County. While not all the jobs are based in Enosburgh, the fact that they are part of operations headquartered in Enosburgh is significant. Of special note is the close relationship between the transportation sector and the local dairy sector. The most prominent businesses in this sector are McDermott's Milk Transport, Richard I. Green Trucking, Vaillancourt's, and Wrightholm.



Above: The Gervais Farm (Photo Credit: Janice Geraw).

Other large employers in Enosburgh include the Enosburgh School District, Hannaford's Supermarket, the Enosburgh Municipal Electric Co, and dairy farming.

#### Agriculture.

The economy of the Northwest Region, particularly with regard to land use, remains predominantly rural and resource-based. According to the 2017 Agricultural Census,

the number of farms in Franklin County declined, but only by 7 farms or less than 1%. The amount of land in farms increased by a small percent with an increase in average farm size as well.

Agriculture is extremely important to the regional and local economy. The agricultural industry exports goods from the Region and imports new dollars into the local and regional economy. Local farm operators tend to rely on other local businesses for their needs. By keeping things local, every new dollar brought into the area increases in value as it circulates. Agricultural related companies have located in the Village to capitalize on proximity to the region's farms; these companies include McDermott Trucking, Vaillancourt Trucking, and Franklin Foods Inc.

The Town of Enosburgh is the "Dairy known as Center of the World." Its importance as one of the most agricultural communities in the State of Vermont has only slightly Although diminished. several of the smaller farms are no longer being operated, much of the land is still in agricultural use, generally by the larger farms. There are still many working dairy farms in the Town. In addition, there are also beef, goat, horse and vegetable farms as well as several logging and



Above: Old fashioned power with a little modern machinery.

maple sugar operations of varying size. During the summer months, there is a farmer's market in Lincoln Park where local farmers can sell their products.

The strong agricultural base that is present in Enosburgh easily lends itself to the current trends in agritourism combining agriculture and tourism; this not only results in additional support for that farm's business but also greater appreciation of the land and knowledge of local agriculture. Agritourism along with value-added products could provide local businesses with a source to diversify their farming venture and maintain a sustainable business.

#### Forestry.

Enosburgh is in close proximity to several commercial mills. Within a sixty-mile radius, within the United States, there are 5 hardwood mills, 4 softwood mills, 1 concentration yard and several portable saw mills. On average, 70% of the Vermont forest harvest comes from the northern part of the state, due to better access to markets. Maple syrup production is high in the region and has increased significantly over the past decade in Enosburgh and neighboring communities. The economic benefits that the forest industry provides to the state, particularly in the rural areas, are greater than any single industry or segment of the economy. The managed use of our forests will continue to provide jobs in logging and primary wood processing, and wood products manufacturing. The goal should be to capture as much value from locally grown timber as possible in the local economy.

#### Tourism.

Tourism is an important component of Vermont's economy and generates revenue from retail sales, accommodations, restaurants, and supports jobs in tourism-related businesses. In rural areas, the traditional landscape pattern of open fields surrounded by wooded hedgerows with a backdrop of wooded hillsides has the potential to attract visitors to Enosburgh.

The Village Center contains well preserved historic structures and features, as well as local businesses selling services and "Vermont" products. Investment in pedestrian infrastructure has made it possible for tourists to leave their cars and enjoy the Village safely on foot. In order to encourage this activity, marketing materials describing self-guided "walking tours" of the Village could be developed in collaboration with local businesses, the Historical Society, and economic development interests.

The promotion of the natural environment and outdoor recreation opportunities serves as both a draw to the resource and brings awareness to their importance. Fishing and paddling opportunities can be found along the Missisquoi River and Tyler Branch. Paddlers also access the Northern Forest Canoe Trail, which passes through the Village along the Missisquoi River linking 740 miles of waterway across New York and northern New England. Walkers, bikers, cross country skiers and snowmobilers can take advantage of the Missisquoi Valley Rail Trail; a 26.4mile recreation trail that crosses the countryside and funnels travelers into the village. Trails such as this provide significant environmental, transportation, health and economic benefits.

The Vital Village Project (Figure 11.2) provides specific recommendations for attracting more tourists, particularly Canadian tourism opportunities. Increasing the wayfinding and marketing around the MVRT was also a primary focus of the Vital Village project.

#### Economic Development.

In response to a struggling local economy and Main Street, the Village Trustees and the Enosburg Falls Economic Development Commission hired Mad River Research to complete a Downtown Business Plan in 2003. The purpose of this plan was to provide the information and analysis necessary to strengthen and expand the economy of downtown Enosburg Falls. The same year, the Vermont Council on Rural Development completed a Community Visit and Action Plan touching on many of the same issues. While some progress has been made in implementing the recommendations of these plans since 2003, the community has struggled to make progress until recently with a resurgence of activity with the Enosburg Business Association, Enosburgh Economic Development Corporation and the volunteer coordinated revitalization effort the Enosburgh Initiative. The Village and Town joined forces in 2018-2019 to complete the Vital Village Master Plan, which targets Main Street revitalization, outdoor recreation and improved pedestrian and bicycling connections (Figure 11.2).

Despite its challenges, the Village of Enosburg Falls has seen many business improvements in recent years; it is experiencing a strong business base, improvements to storefronts, and a connected sidewalk system which aid in encouraging new business and growth to the area. The Enosburgh Business Association, made up of local business owners, assists with keeping the business community vibrant with community events and promotions. The Cold Hollow Career Center is also vital resource as it aids in training the future workforce to bring those trained workers into the economy.

#### Figure 11.2. Vital Village Project

#### Vital Village Project.

In 2018, the Village and Town joined forces to complete a village master plan, funded by a State of Vermont Better Connections Grant. Known as the Vital Village Project, the master plan was completed in 2019 with an overarching focus on physical improvements and programmatic/policy initiatives to improve economic development in the Village Center. The plan can be accessed digitally from this website: www.enosburgvitalvillage.org. The plan outlines five (5) top priorities for implementation, which include:

- Streetscape and wayfinding improvements on Main Street and Depot Street, •
- Improvements to the Missisquoi Valley Rail Trail intersection, •
- Developing a community wide brand and •
- Promoting Canadian Tourism. •

Many recommendations to further these priorities have been incorporated into this plan. Provided here are the policies and projects recommended by the plan to promote tourism.



- Enosburg Falls should encourage Canadian visitors to extend their trip and come more frequently for the recreation, dining, and
- Enosburg Falls should expand their offering and promote through Canadian social media, list serves, and local publications
- Collect information about visitors where are they coming from? How did they hear about Enosburg Falls? What activities or attractions did they visit?
- These questions could be asked at the point of sale at local
- This information should guide future tourism planning efforts and help address gaps in the tourism offering

#### Open tourist-friendly businesses

- Encourage tourist-friendly businesses to open on Main Street such as restaurants and gift shops
- Additional shopping options on Main Street would also be enticing
- These restaurants and shops would make the village a better place to live for residents as well

Feasibility	/		
COST	\$\$ •	•	•
LOGISTICS	88	•	•
TIMING	<b>(</b> · · <b>(</b>	•	•

Competition for industry is high, and Enosburgh has not experienced any improvement in its manufacturing economy in recent years. Recently, the Enosburg Economic Industrial Corporation (EFEDC) was reconvened to work towards attracting development to the Industrial Park after faltering for several years. These lots have access to water and sewer lines and are

zoned for industrial development; the Town is seeking to permit mixed used on these lots by amending the applicable permits.

#### Goals, Policies and Recommendations.

#### GOALS

- > Promote a balanced, diverse economic base, with a focus on locally owned enterprises.
- Support economic growth that complements existing firms and the vitality of the downtown business district.

#### POLICIES

- Enhance and protect the economic vitality of the Village and population centers as important community assets by promoting the reuse of existing buildings and recognizing the impact of the built aesthetic.
- Encourage commercial and industrial development within the Central Business District and Industrial Park.
- When planning for commercial and industrial development, encourage such development to serve the public good in terms of employment, revenue, environmental quality, health and safety, and services.
- Promote a diversified and stable economy by encouraging compatible industrial and commercial development, supporting the expansion of existing industry and small business, and encouraging businesses that utilize the skills of the local labor force.
- Support agriculture and forestry related businesses, and protect productive agricultural and forestry lands from conversion to incompatible land uses.
- Recognize and encourage the positive economic impact from recreational activities and local events such as art exhibits, musical events, craft fairs and farmer's markets.
- Increase availability and access to groceries, farmers' markets, and community gardens to expand healthy and local options.
- Support home-based occupations.

The use of land, both historically and currently, defines the physical make-up of the municipality, providing not only a sense of place, but an insight to how the community functions economically, physically and socially. As Vermont's economy expands beyond natural resource-based businesses towards technology-based businesses, the factors that determine the lands economic value have changed. Previously it was determined by the productivity of a piece of land for farming or timber, while today features such as access to major transportation networks; infrastructure such as telecommunications, water and sewage systems; and proximity to qualified labor markets all help in determining the value of land for economic development.

Technological advances also have an impact on land use. Current technology allows projects to be completed much more rapidly today than in the early years. The construction of roads and the use of transportation technology allow people and materials to move rapidly and reliably over the landscape. Telecommunication and technological advances further erase geographical limitations. Changes in State sewage regulations and the design of innovative sewage management systems also help in reducing the number of constraints on land development. Previously, land that was thought to have too many constraints can now be more easily developed.

Land use planning involves the consideration of the many possible types of land uses and the goals of the land users. The impacts of growth, development, and environmental change on the land should be taken into consideration before any changes are made to the land. These changes will have a lasting effect on the community.

#### Current Land Use.

Enosburgh covers a total of 30,925.29 acres or approximately forty-eight square miles. The majority of land in town is comprised of forestland and agriculture. Deciduous, coniferous, and mixed forest account for 64 percent of the total land area with agriculture comprising 30 percent (Landsat 2002, Map 12.1).

Much of Franklin County's eastern section, including the Town of Enosburgh, is wooded, hilly, and well suited for forestry. Forested areas are beneficial for both the economic livelihood of the rural communities and for the natural habitat they provide. "Non-productive" uses of land, such as protection of wildlife, provide substantial benefits to society, ranging from the economic returns arising from tourism to the benefits of water purification and flood control.

Enosburgh can best be described as a diversely agricultural community. Similar to the trend across the state, Enosburgh has seen a decrease in the number of farms over the last ten years. In most cases these farms are still managed as agricultural resources but are owned and managed by a fewer number of owners. The Vermont Land Trust has worked with several landowners to conserve existing farmland by the purchase of development rights to ensure that this land will remain perpetually open; currently there are 3,339 acres conserved in Enosburgh. The purchase of conservation easements has provided farmers with one tool to keep their farms permanently

managed for forestry and agriculture. Other agricultural uses include maple sugaring operations and commercial greenhouses.

Enosburgh has maintained the character of the traditional village center, with a Main Street consisting of multi-story brick blocks at its heart and surrounded by residential and additional commercial areas. Most neighborhoods are characterized by an amiable mixture of land uses and there is still a sizable portion of land within the Village which is open and in use for agriculture or woodland. The Central Business District has experienced a period of renewal with the 2007 redevelopment of the Depatie/Abbott Block which provided residential apartments and additional retail space in the village center.

In recent years, commercial development has increased in the commercial districts in the north and west Village on Route 105. It is important to implement strict design standards to maintain pedestrian accessibility within the Commercial Districts and from the commercial districts to the Central Business District.

The high school, elementary school, and the vocational center are all located within the High Density Residential District. The Planning Commission should work with the School Board to ensure that sufficient land is secured for educational facilities and future growth, either in the neighborhood of existing facilities, or at a new location. Particular attention should be given to maintaining the schools' role as central to the community and to recreational spaces that can be accessed by residents of all ages.

#### Village Designation.

The Village of Enosburg Falls Village Center was designated on February 2006 as a way to support the revitalization of the existing traditional village center. The Village Center is composed of an interconnected core of residential, civic, religious, and commercial buildings arranged along Main Street and the adjacent areas.

This designation supports the goals of the community by gaining access to several benefits such as receiving priority consideration for state grants, access to tax credits, priority consideration for state building and general services when leasing or constructing buildings, and allows for the creation of a special assessment district within the Village Center to



Figure 12.1. The Area Designated as the Village Center

use funds for operating costs. The Village Center also aligns with the statewide planning goals

of compact development and maintaining the historic settlement pattern as stated in 24 V.S.A. § 4302.





#### Constraints to Development.

Areas with steep slopes (20% or greater), shallow soils, high water table, or within the flood plain are poorly suited for development. These site conditions may entail high maintenance costs, and pose a burden to municipal taxpayers as well as hazards to public health and safety. Development in these areas may also compromise the quality and quantity of ground and surface waters and other natural resources, and therefore should be restricted.

#### Proposed Land Use Districts.

A trip through Enosburgh offers a picturesque display of landscape features – small hamlets, the village of Enosburg Falls, rolling forested hills, farms fields with scattered homes, wetlands, and rivers. Together these landscape elements make Enosburgh what it is today. Some of these features were created by limitations of the environment to support development while others are historical remnants from the days of water powered mills.

The development of the Proposed Land Use Districts are based on existing land use patterns, traffic patterns, the intensity of proposed uses, physical constraints of the land, the resident's vision for the community, and several long-range planning goals and objectives. The Village of Enosburg Falls is expected to continue to be the primary residential, commercial, and industrial center for the surrounding town. The village is expected to provide the services needed by the businesses and residents in order to maintain the village densities.

The vision for the future of Enosburgh is to preserve the rural and agricultural character and protect the natural assets. Future development should aim to conserve agricultural soils, water quality, forests, and wildlife while allowing for additional residential and commercial growth. The aim of this plan is not to stop growth but rather to guide development in the future away from some areas and towards others.

To further the goals, policies, and recommendations set forth in this Plan, the following twelve (12) land use districts and three (3) overlay districts describe the current zoning districts in Enosburgh, shown on Map 12.2.



Map 12.2. Draft Land Use Districts in Enosburgh

#### CENTRAL BUSINESS DISTRICT.

The purpose of the Central Business District is to provide a concentrated area to serve the business, service, and social needs for the community as well as the region. The historical character of the district focuses upon pedestrian access to a mixture of retail sales, personal services, professional services, business offices, and high density residences tightly spaced with minimal setback from the street. Residential uses add interest and vitality to the area and accommodate those who desire high-density housing.

Pedestrian travel will be encouraged by well-maintained and landscaped walkways that connect the District to other commercial and residential areas of the Village. Public open space is provided for rest and recreation, and to increase the district's scenic quality. Public events such as art exhibits, musical events, craft fairs, and farmers markets are encouraged.

#### COMMERCIAL.

The purpose of the Commercial Districts is to provide areas with public water and sewer for larger-scale, land-intensive retail, commercial, and high density residential development that may not be suited to location in the Central Business District. These areas are intended to complement the Central Business District, and efforts will be made to connect them by attractive pedestrian paths, internal roadways, and landscaping.

The Commercial Districts are located at entrances to the Village, and they must be designed to create a positive first impression for visitors. Master planning will be encouraged in order to promote efficient and economic connection with existing services and facilities. Development within the District will be reviewed to ensure attractiveness of sight design and signs. Strip development will be controlled by limiting the number of curb cuts and requiring consolidated access points onto RTE 105.

#### INDUSTRIAL.

The purpose of this District is to provide an area with good highway access and municipal water and sewerage for manufacturing, warehousing, research and development, and their accessory uses. Since these are intensive uses with potential impacts and hazards to public health and welfare, all uses within the District shall receive conditional use review by the Development Review Board. Master planning will be encouraged in order to promote efficient and economic connection with existing services and facilities.

#### HIGH-DENSITY RESIDENTIAL DISTRICT.

The purpose of this District is to maintain the privacy, and property values in established traditional residential neighborhoods. Industrial and most commercial uses should not be allowed in this district to maintain a safe, residential character. This area is served by public services and facilities. Efforts to retain and improve the quality and vitality of older neighborhoods through restoration of deteriorating buildings should be encouraged. Residential development in this District should provide for a variety of dwelling types and for the needs of people of all income levels and ages.

#### LOW DENSITY RESIDENTIAL.

The purpose of this District is to provide opportunities for residential development at densities appropriate to the physical capability of the land outside of the more densely settled village area. These areas have public water supplies and may or may not have municipal sewerage. A density bonus will be offered to encourage clustering of dwellings in this district in order to conserve open land for recreation, aesthetics, agriculture, and forestry.

#### **RURAL RESIDENTIAL.**

The purpose of this District is to protect those areas which are used for agriculture but to allow for uses other than agriculture and forestry, including residential and compatible uses, at a density these areas can support in accordance with the municipal plan. Of top concern is the protection of prime agricultural soils. Historically, rural development was considered "scattered" but today the goal is for "clustered" growth. In this way, large contiguous open space is protected for farming and pockets of housing will occur in less productive areas.

#### AGRICULTURAL/RURAL RESIDENTIAL DISTRICT.

The purpose of this District is to maintain the predominantly agricultural character of the area with its scattered residences. Since much of this district is prime farmland, new residential and other nonfarm development will be reviewed to ensure minimal interference with continuing agricultural use. Planned unit developments, the clustering of houses and developments that do

not remove land from production will be encouraged by a density bonus.

#### AGRICULTURAL DISTRICT.

The purpose of this District is to protect the long term viability of productive farmland in the Town for agriculture use by 1) protecting prime agriculture soils as mapped by the U.S. Natural Resources Conservation Service (NRCS), 2) minimizing the fragmentation of productive farmland, and 3) mitigate the adverse effects of development on farmland operations. Other uses may be conditionally allowed, including residential use at a low density.

#### What is a Land Fragmentation?

Fragmentation is the separation of parcels of land into ever-smaller pieces, with like uses interspersed with unlike uses.

A forest cut into two by a power line or two farms separated by a townhouse development are examples.

#### **RECREATION DISTRICT.**

The purpose of this District is to reserve areas for current and future outdoor recreational facilities. The District includes areas within the Village that are presently being used for private and/or public recreation as well as additional areas to be reserved for the development of outdoor recreation facilities. It is intended that no development other than outdoor recreational use occur in this District.

#### **CONSERVATION DISTRICT I.**

The purpose of this District is to protect the scenic and natural resource value of lands which lack direct access to public roads, are important for wildlife and wildlife habitat, and which are poorly suited for development. Location, topography, and soil limitations make lands in this district unsuitable for intensive development. Included are areas of steep slope and wetlands.

No public water or sewer facilities are planned for these areas. Only low-density residential development, limited outdoor uses, conservation uses, agriculture, and forestry compatible with the district purposes will be allowed.

#### **CONSERVATION DISTRICT II.**

This district is defined as areas that, by reason of its soil and topography, have limited development potential or are more susceptible to environmental degradation. Steep slopes (over 15%), wetlands, deer yards, and high elevations (over 1,500 feet elevation) are all areas in the conservation district. The purpose of this district is to protect the pristine and sensitive areas of the Town, that are primarily used for forestry and outdoor recreation, from the adverse effects of development and growth but to allow for uses other than forestry, including camps and other compatible recreation uses, at a density these areas can support.

#### **GROUNDWATER SOURCE PROTECTION AREA.**

This district serves to protect the source of water for the East Berkshire Water COOP, an area around a spring off the Woodward Neighborhood Road in the northeast corner of Enosburgh, which has been designated as a "Groundwater Source Protection Area" by the State of Vermont. This district also includes an area in Northwest Enosburgh which is a water recharge area for the Village of Enosburg Falls.

### FLOOD HAZARD OVERLAY DISTRICT.

The purpose of this District is to prevent increases in flooding caused by development in flood hazard areas, to minimize future public and private losses due to flood, and to promote the public health, safety, and general welfare. Designation of this District is also required for continued eligibility in the National Flood Insurance Program (NFIP). Included are all areas in the 100-year floodplain as identified on the Flood Insurance Study map(s). The Flood Hazard District overlays other districts and places additional restriction upon development in the areas to which it applies.

#### NATURAL RESOURCE OVERLAY.

Designation of this district is intended to protect the scenic and natural resource values of lands which are important for wildlife and wildlife habitat, and which are poorly suited for development because of their environmental constraints. This area maintains large tracts of forest, protects significant wildlife habitat, and ensures connectivity between habitats. Land uses and development in this district should be planned and designed to be compatible with the surrounding characteristics of the landscape, to be harmonious with wildlife habitat and the species that depend on this habitat and should recognize and protect the full range of vegetative and animal habitats and species in the Town. The district includes areas which have significant geologic features, unusual or important plant and animal qualities of scientific, ecological or educational interest, steep slopes, waterways and significant wildlife habitat.

### WETLAND OVERLAY DISTRICT.

The purpose of the Wetland Overlay District is to protect the natural system functions (e.g. water and air purification, flood attenuation, speciation, and nutrient cycling) that are critical to support the human, animal, and plant populations in Enosburgh.

#### Goals, Policies and Recommendations.

#### **GOALS:**

- Maintain the traditional village center surrounded by a landscape of farms, forestry, and rural countryside.
- Encourage development in the rural areas of town to be clustered to preserve the open rural landscape that defines Enosburgh for the future.
- Preserve the working landscape of farms and managed forests to support economic opportunities.
- > Promote and enhance the historic features and character of the Village.

#### **POLICIES:**

- Encourage and preserve the dense development in traditional village centers; maintain the character of existing neighborhoods and discourage strip development.
- Encourage clustering of residential development to conserve open areas for recreation, aesthetics, agriculture, and forestry.
- Support the vitality of the Central Business District while accommodating larger scale, more land intensive commercial development.
- Promote a pattern of land uses which connect the Central Business District to outlying commercial areas via pedestrian paths, sidewalks, public green spaces, and landscaping.
- Promote industrial expansion and the development of new industries.
- Utilize the scenic natural features of the Village to enhance the business climate and supply the recreational needs of the community.
- Conserve productive lands and maintain forest health by accommodating development in areas apart from most farming and forestry activity.
- Prohibit development on slopes greater than 20% and minimize clearing of natural vegetation on steep slopes.
- Discourage development in areas with steep slopes, shallow soils, high water table, or productive agricultural soils.
- Protect scenic ridges by prohibiting development above 1,500 ft in elevation.
- Protect water quality by limiting development in Groundwater Source Protection Areas, wetlands, and along stream banks.
- Recognizing the community's susceptibility to flooding, new development shall conform to adopted floodplain regulations to protect public health, welfare and safety.
- Continue to support the efforts of the conservation commission and local land trust.

## Chapter 13: Compatibility with Neighboring Towns and the Region

Enosburgh is located in central Franklin County and bordered by the communities of Franklin, Berkshire, Richford,

Berkshire, Rick Montgomery,

Bakersfield, Fairfield, Sheldon and (See Figure 13.1). Land use patterns in all of these towns can affect one another in manv different ways. It is important that all of their development patterns are compatible with each other. It is important also that each town's future development plans do not adversely affect bordering their neighbor's plans. The Enosburgh Municipal Plan does not propose any major changes to its land use districts,



Figure 13.1. The Location of Enosburgh in Relation to the Surrounding Communities and the Northwest Region of Vermont (Franklin and Grand Isle Counties)

and because of this, no substantial conflicts with adjoining Town Plans should arise.

#### Planning with Adjacent Communities.

The community shares a variety of common resources, infrastructure, and issues with adjacent communities. It is important that all parties work together in planning for and managing these shared interests. In addition to managing growth, the quality and supply of public drinking water is an important multi-town interest. The Village of Enosburg Fall's municipal water supply is located in the Town of Berkshire and Berkshire's is in the Town of Enosburgh. It is vital that these communities manage the land use in those areas so that the quality of the community water supplies is protected.

#### Compatibility with Adjacent Land Use Plans.

Enosburgh's Land Use plan is compatible with the land use plans for the region and adjacent municipalities. There are however, a few areas that require cooperation between adjacent municipalities to control growth around the Village of Enosburg Fall's sub-regional growth center (Map 13.1) and industrial areas. Within the Village of Enosburg Falls, the growth center is mainly composed of high density residential development, the Central Business District, and commercial and industrial development. However, on the Village's edge, the growth center borders Sheldon along Route 105 and corresponds to Sheldon's Rural Lands District I that

allows for commercial development as a Conditional Use or based on Site Plan review and to the east the Village's Industrial District borders the Town of Enosburgh's Agricultural District. There is a risk that the growth center and Industrial District will increase the development pressure in adjacent areas and create sprawl along Route 105. While it is important for Enosburgh to keep implementing planned growth and master planning with careful consideration of access management, landscaping, and Franklin County's rural character, it is also important for adjacent communities to consider land use planning from a multi-town perspective and to consider the consequences of growth. In order to prevent sprawl outside of designated areas, strict land use controls may be necessary, such as limited



Map 13.1. Enosburgh's Sub-Regional Growth Center Area

allowed uses, planned unit developments, and access management.

Compatibility of this plan with those of adjacent municipalities and the Region was undertaken by reviewing those plans and zoning districts along the borders of Enosburgh. The majority of the areas at the border of Enosburgh are in the current Agricultural or Rural zoning districts, which allow density of 1-acre lot for residential or professional services and 5 acres for allowed commercial and industrial uses. The borders along the Village of Enosburg Falls to Sheldon, Franklin, and Berkshire abut the current Low Density Residential, Agricultural/Rural Residential, and Conservation districts. The Low Density Residential establishes less than 1-acre minimum lot sizes and the Agricultural/Rural Residential establish a minimum size of 2 to 2.5acres depending on use.

Similar zoning districts exists in the adjoining municipalities:

- *Franklin* Rural Residential/Agricultural District.
- <u>Berkshire</u> Rural Lands District (5-acre zoning). Berkshire's Wellhead Protection Overlay (10-acre zoning) and Flood Hazard Overlay along this border correspond with Enosburgh's designated districts.

A consideration to note, in Berkshire's most current Land Use and Development Regulations (adopted February 18, 2019), a wellhead/source water protection area is identified to provide protection to the water supply. However, residential uses are allowed as a conditional use in the protection area and the regulation of onsite septic systems is out of the town's authority. Berkshire should carefully review new development to assure that there will be no negative impact to water quality or supply and in the future, assess whether new development should be prohibited.
<u>Richford</u>	Agriculture District (2-acre zoning).
<u>Montgomery</u>	Agricultural/Residential District (4-acre zoning) and the Conservation I and II Districts (10-and 20-acre zoning respectively).
<u>Bakersfield</u>	Primarily Rural District (10-acre minimum) with the higher elevation areas to the east in Conservation District (25-acre minimum).
<u>Fairfield</u>	Agricultural/Rural Residential District (1-acre, expect 35-acres for camps), Chester A. Arthur Scenic District is a 1,000ft buffered area around the Chester A Arthur Road and has special conditions outlined in their zoning.
<u>Sheldon</u>	Districts Rural Lands I and II (1 acre and 10-acre zoning respectively); the Rural Lands I district consists of a buffered area around all town and state roads.

## Compatibility with the Regional Plan

The Regional Plan was most recently adopted in August 2007 and is currently in the process of being updated. Many of the Regional Plan's goals and policies were based on ideas expressed in local plans. Though the goals and policies listed in the Regional Plan are consistent with the goals and policies that each town has listed in their own plans, they may be tailored somewhat to each town.

## **Chapter 14: Implementation**

	IMPLEMENTATION RECOMMENDATIONS	Who's Involved?	STATUS
	HISTORIC, ARCHEOLOGICAL &	SCENIC RESOUR	RCES
1.	Provide improved wayfinding and promotion of public sites with historic and scenic significance, such as the Bridge of Flowers and Light, Town Forest, Opera House and the Missisquoi Valley Rail Trail. Work with the Trustees to ensure tis perspective is addressed in scoping study for streetscape and wayfinding.	Historical Society; Planning Commission; Conservation Commission	Scoping Study to be completed by 2021. Design and construction should be completed by 2028.
2.	Review the allowable land uses, dimensional requirements, street design and parking requirements in the zoning bylaws to ensure that they promote the historic character of Village neighborhoods and Village center.	Planning Commission	Complete during next zoning revision by 2025.
3.	Monitor Village Zoning Bylaw provisions that provide incentives for the adaptive reuse of historic structures. As a first step, inventory projects that have been approved under this criterion. Consider adding and adaptive reuse provision to the Town's regulations.	Planning Commission, Zoning Administrator	Complete prior to next zoning revision, before 2025.
4.	Continue to pursue historic markers for important historic landmarks in the Village and Town.	Historical Society, High School	Two markers done, complete at least 4 more markers by 2028.
5.	Promote a historic walking tour of the village with the major landmarks. Evaluate whether changes should be made and develop marketing materials and messaging.	Historical Society, other interested partners	By 2025
6.	Collaborate on community events that highlight Enosburgh's historical heritage.	Historical Society, Enosburg Business Association	Ongoing
	NATURAL RESOURCES		
7.	Maintain and update a multiple use forest management plan for the town forest.	Conservation Commission	Once every 5 years (next 2025).
8.	Provide educational materials and assistance in planning to prevent or minimize destruction of core habitat and wildlife connectivity areas. Discuss how	Conservation Commission	Ongoing

IMPLEMENTATION RECOMMENDATIONS	WHO'S Involved?	STATUS	
best to achieve this.			
HOUSING			
9. Consider adoption of a basic building code to ensure health and safety of residents and community.	Manager / Planning Commission	Make determination by 2025	
10. Complete a housing needs analysis to ensure Enosburgh continues to meet the communities' housing needs.	Planning Commission	By 2028	
11. Review the zoning bylaws to ensure that regulations to not inhibit and rather enable and incentivize affordable housing development.	Planning Commission	Next bylaw revision by 2025	
EDUCATION			
12. Hold annual meetings with representatives from the Village Trustees, Town Select Board, Enosburgh School District, and Franklin Northeast Supervisory Union to ensure better communication and coordination of all planning needs and issues.	Planning Commission	By 2028	
13. Coordinate capital budgeting and programming between the Village, Town, and School District.	Village Manager, Planning Commission	Ongoing	
PUBLIC UTILITIES, FACILITIES & SERVICES			
14. Consider developing a Capital Budget & Program that includes planned expenditures for municipal utilities and facilities.	Trustees/ Planning Commission	By 2028	
15. Bring together Village & Town officials to discuss a comprehensive plan for public land holdings and their best use and management.	Planning Commission	By 2028	
16. Redesign and construct an expansion of the Enosburgh Recreation Fields to address multi- generational recreation needs and increase recreation offerings for the community.	Recreation Committee	By 2025	

IMPLEMENTATION RECOMMENDATIONS	WHO'S Involved?	STATUS
17. Hold a community-wide forum on child care to gain a fuller understanding of families' child care needs and the Enosburgh's child care industry.	Planning Commission, Enosburg Initiative Partners, Enosburgh School	By 2025
<ol> <li>Identify a safe and accessible connection to the recreation fields by the Emergency Services Building from the existing Village facilities that will serve bicycle and pedestrian users.</li> </ol>	Village Trustees, VTrans, Regional Planning	Funding secured; to be completed 2020
19. Provide better wayfinding for the Brownway River Trail, especially for Missisquoi Valley Trail users, as recommended in the Vital Village Master Plan.	Conservation Committee	By 2025
20. Complete a needs assessment for the Town of Enosburgh Offices, consider potential properties or options for expansion and build a reserve fund for the project.	Selectboard, Town Clerk	By 2028
TRANSPORTATION		
21. Develop a prioritized list of streets and roads where traffic studies are needed to provide information for local road/street management.	Planning Commission, Trustees, Selectboard	By 2025
22. Develop a traffic calming program for Orchard Street.	Planning Commission/ Trustees	By 2025
23. Install wayfinding and signage for public parking options in the Village.	Village Trustees, Vital Village Steering Committee	Scoping Study to be completed by 2021. Design and construction should be completed by 2028.
24. Continue to contract with State Police and Sheriff to enforce local traffic ordinances.	Trustees	Ongoing
25. Participate in regional transportation planning efforts, including the Transportation Advisory Committee, Green Mountain Transit Authority, and the Missisquoi Valley Rail Trail Council.	Planning Commission/ TAC Representative	Ongoing
26. Consider developing a Capital Budget & Program that includes a plan for local street and sidewalk. improvements, future growth of roads, bridge repair and replacement, and equipment replacement.	Planning Commission/ Village Manager	By 2028

IMPLEMENTATION RECOMMENDATIONS	WHO'S Involved?	STATUS	
27. Implement the streetscape and wayfinding enhancements to Main Street and Depot Street as proposed in the Vital Village Master Plan.	Village Trustees, Vital Village Steering Committee	Scoping Study to be completed by 2021. Design and construction should be completed by 2028	
28. Prioritize and implement community wide pedestrian/bicycle/mobility enhancements as recommended in the Vital Village Master Plan.	Trustees, Vital Village Steering Committee	By 2028	
29. Work with the Vermont Agency of Transportation to install the trailhead parklets on the west and east side of Main Street where the Missisquoi Valley Rail Trail crosses.	Trustees, Vital Village Steering Committee	By 2021	
HAZARD RESILI	HAZARD RESILIENCY		
30. Work with first responders, Emergency Management, and the road crew to plan improved emergency response capacity (operations, training, equipment) during natural disasters.	Emergency Management Director/Public Works	Ongoing	
31. Adopt the Vermont River Corridor standards to regulate development in high risk areas for flooding or erosion hazards and gain access to additional Emergency Relief and Assistance Funds for disaster recovery.	Planning Commission	Next bylaw update by 2025	
32. Explore participation in the FEMA Community Rating System (CRS) so as to secure a discount on flood insurance.	Planning Commission/ Selectboard/ Trustees	Next bylaw update by 2025	
ENERGY			
33. Complete any remaining energy audits on municipal buildings and develop a schedule for needed improvements.	Manager/ Trustees	By 2025	
34. Modify development regulations to require or incentivize the use of energy efficient building and site design techniques.	Planning Commission/ Zoning Administrator	Next bylaw update by 2025	
35. Work with Selectboard and Trustees, along with municipal staff to establish energy standards for all public facilities and equipment.	Planning Commission	By 2028	
36. Provide education and outreach to residents on energy efficiency and conservation measures.	Zoning Administrator	Ongoing	

IMPLEMENTATION RECOMMENDATIONS	WHO'S Involved?	STATUS
ECONOMY		
37. Establish and maintain communications with the Enosburg Falls Economic Development Corporation, Enosburgh Business Association, Village and Town officials, school district, and local business people to best serve the community and surrounding areas.	Planning Commission	Ongoing
38. Support efforts of the Enosburgh Initiative, Enosburg Business Association and other community groups on expanding economic opportunities in the Village and Town.	Trustees, Selectboard, Planning Commission	Ongoing
<ul> <li>39. Work with the Franklin County Industrial Development Corporation and the Enosburg Falls Economic Development Committee to encourage occupancy of the Enosburg Falls Industrial Park.</li> </ul>	Trustees, Selectboard, Planning Commission	Ongoing
40. Promote and provide wayfinding for the Missisquoi River and Missisquoi Rail Trail as recreational resources and attractions to the Village.	All Municipal Boards	Scoping Study to be completed by 2021. Design and construction should be completed by 2028
41. Develop a community wide brand that will bolster community pride and cohesion and help to define the visitor experience.	Trustees, Selectboard, Vital Village Steering Committee	By 2022
42. Design and install a gateway and wayfinding signage scheme for the entire village that both introduces and orients visitors to the village and its places of interest.	Trustees, Vital Village Streeting Committee	Scoping Study to be completed by 2021. Design and construction should be completed by 2028
43. Foster and support the Vital Village Steering Committee in implementing the Vital Village Master Plan.	Trustees, Selectboard	Ongoing
44. Review sign regulations to ensure they are compatible with the pedestrian oriented traditional village center and the Vital Village Master Plan.	Planning Commission	Next bylaw update by 2025

IMPLEMENTATION RECOMMENDATIONS	WHO'S Involved?	STATUS
45. Research what the community can do to support and foster agro-tourism opportunities in the community.	Planning Commission, Vital Village Steering Committee	By 2025
LAND USE		
46. Work with landowners, the Vermont Agency of Transportation and Regional Planning Commission to develop a comprehensive long-range plan for access onto Route 105, which provides safe access while limiting curb cuts.	Planning Commission	By 2028
47. Maintain and implement development regulations that effectively preserve prime agricultural lands and maintain the productivity of agricultural land.	Planning Commission, DRB	Next bylaw update by 2025
48. Review Development Regulations to ensure that development maintains the character of the traditional village setting (for example development is oriented towards the public right of way, includes sidewalks and other pedestrian amenities, and is appropriately landscaped, including street trees).	Planning Commission and DRB	Next bylaw update by 2025
49. Identify critical habitat areas in order to prevent or mitigate harm during planned development.	Conservation Commission/ Planning Commission	By 2028