

## FORWARD

---

Comment [TN2]: Keep?

***The following letter was written to the municipality of Swanton by Kikata, Junne, Hirooka, Yoshiro Edward, and Tatsuya Utsuni, "Lasting Impressions", presented as part of the UVM/Tokyo University of Fine Arts and Music, Historic Preservation Exchange at a public meeting held on October 12, 1993 at the Mary Babcock Elementary School, Swanton, Vermont translated from Japanese by Joy Seeley.***

To the People of Swanton:

"When you look at a town for the first time, and want to understand its essence, you must ask yourself "Why is it here, and not somewhere nearby?" You must look at its human activities, as its inhabitants interact with their natural setting, and you must pay close attention to clues that help you understand past activities as well as present ones. Among these various interactions of people with their environment will be one or two primary sources of a town's vitality and unique characteristics. We call this DORYOKUGEN, and this is what we looked for as we walked through your town yesterday.

Although a number of factors have had strong influences on Swanton's establishment and development, we found that Swanton's key DORYOKUGEN are its natural resources, specifically the river, which has provided transport, energy, etc., and the abundant limestone and marble available here which you and your ancestors could sell for income as well as use as building materials for the Town. Because of the river and quarries, people settled here, industries developed, railroads were put in, and Swanton flourished.

Throughout your town are many clues and indications which clearly point to the history of the human activities of those who lived here before you. Some of these, we photographed. Some, we sketched. Why are these signs of your past important? Because now, at the end of the 20th century, and on into the next one, they will be a fundamental source of identity and pride for present and future residents in Swanton. During the latter half of this century, transportation and communication systems changed dramatically. This resulted in enormous changes in the way humans interact with the immediate environment, the one in which they live. Before transport systems became super-high-speed and communication systems instantaneous, the identity of a town was readily apparent. One knew why it was there by watching its inhabitants make use of nearby natural resources to live and work and play. Now, a multitude of complex, invisible factors affect the character, activities, and even the very existence of the towns, making less clear that relationship of humans to their environment. This is true throughout the world, including our country of Japan.

Unfortunately, this often results in the loss of a town's original character, of what helps its residents love it and identify with it and with each other. This in turn results in loss of community spirit, of the willingness to contribute one's energies for the town's good.

Please do not let this happen to Swanton. You have a beautiful town that has retained all that is best about American culture and society: hard work, creativity, and a warm, openhearted community spirit. You have a rich, fascinating history that is closely related to your environment, and that history is clearly visible throughout the Town. Please preserve these traces of your past. They will remind you of who you are, and where you came from. They will provide you and your descendants with an ongoing source of inspiration as you work together towards the future.

Thank you.”

**CHAPTER 1**  
*১*  
**INTRODUCTION**

---

**A. PURPOSE**

The purpose of a municipal plan is to help guide decision-makers in charting the future of a community. The Swanton Town and Village Municipal Plan contains a vision of the communities' future. Goals and objectives within the plan will help to guide the Town and Village to implement that vision. The plan also includes a brief reflection of the past and an examination of existing conditions.

As required by statute, this plan was developed from an established planning program. The planning program for this plan involved the public in a variety of ways. Through this collective effort the vision and recommendations were developed with the best interests of the community as a whole in mind. Particularly valuable to this plan was public input gathered from the Community Visit process, a program administered by the Vermont Council on Rural Development as a way to engage community residents to set common goals. Much of the community vision developed during the Community Visit has been incorporated into this plan.

It is anticipated that if recommendations of the Plan are implemented, the quality of life in Swanton will be positively affected. The Plan addresses topics including: land and land use patterns, population, housing, community facilities and services, transportation, education, natural resource features, historic, cultural and archaeological resources, energy, and economic development.

Recommendations within this Municipal Plan are based on an analysis of current conditions, the input of many residents, projections of housing and population, and development trends in the Town, Village, and surrounding region. The goals and recommendations of this plan are long-term and it is expected that Swanton will re-examine them periodically and amend the Plan as needed.

Beyond managing the Swanton Town and Village planning program and maintaining the municipal plan, the Planning Commission is charged with the following specific tasks:

- Developing the Zoning and Subdivision bylaws.
- Developing a Capital Budget and Program
- Providing additional information and data to guide decision-makers in developing new policies.
- Identifying areas where additional study is needed.

- Deleted: A plan
- Deleted: Town in
- Deleted: the f
- Deleted: and g
- Deleted: that
- Deleted: It also
- Deleted: status
- Deleted: A Plan is
- Deleted: Town

Comment [TN3]: Does the PC do this?

**B. AUTHORITY**

The Town of Swanton is authorized to prepare and adopt a Municipal Plan via Chapter 117, Title 24 of the Vermont Statutes (Vermont Municipal and Regional Planning and Development Act). Section 4302 of the Act specifies the statutory requirements of the law to be incorporated 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.

**C. ADOPTION PROCESS**

The adoption of this Plan will be in accordance with Sections 4385 and 4387 of Vermont's Planning and Development Act (24 VSA 117). Prior to submission to the Joint Legislative Body, the Planning Commission shall hold at least one public hearing within the municipality after public notice on the amended Plan. At least 30 days prior to the first public hearing, the Planning Commission must deliver a copy of the amended Plan to: 1) the chair of the Planning Commission of each adjoining municipality; 2) the Executive Director of the Northwest Regional Planning Commission; 3) the Department of Housing and Community Affairs; and 4) any business, conservation or other interest groups that have requested a copy.

Following adequate opportunity for the public to comment on the draft Plan, the Planning Commission shall make any desired changes and then file a copy with the Town Clerk for public review. At the same time a copy is forwarded to the Joint Legislative Body for review. The Plan may then be adopted at a meeting by a majority of the members of the Joint Legislative Body after no less than two separate public hearings.

Deleted: re-  
Deleted: Subsequent to no less than two public hearings, the Plan shall be adopted at a meeting by a majority of the members of the Joint Legislative Body. ¶

**D. HISTORY OF THE PLANNING PROGRAM AND PLAN DOCUMENT**

In February of 1993, the Swanton Planning Commission requested a proposal for assistance from qualified planning consultants to assist them with establishing a planning program for updating the 1988 Municipal Development Plan for Swanton Town and Village. A month later, the Swanton Planning Commission interviewed several consultants and selected Research and Evaluation Specialists of Vermont (RESV), a planning consulting firm to assist them in updating the Plan. RESV worked with the Planning Commission to write this original Plan, which was revised in 1999, 2004, 2005, and most recently in 2010.

Deleted: 09

The Planning Commission decided on a planning program that would assess the existing conditions of the Town, involve the public throughout the process, and develop a vision for the future of Swanton that includes a series of goals, objectives and recommendations to implement the Plan. For the first edition of this Plan, the Planning Commission conducted a

windshield survey of the Town whereby all existing buildings in Swanton were mapped. Residents were asked to complete a planning questionnaire. They were also invited to participate in several public forums and Planning Commission work sessions. Residents were then asked to join a subcommittee and participate in drafting specific goals and recommendations for the Plan. The 2005 revision of the Plan also used the work of subcommittees to involve the community in updating goals and recommendations of the Plan. Figure 1.1 below lists the history of developing this Town Plan.

**Figure 1.1**  
**History of the Swanton Town Plan**

<b>1988</b>	Planning Commission created the Municipal Development Plan for Swanton Town and Village
<b>1994</b>	With a Municipal Planning Grant the Planning Commission sent out request for proposals to update the 1988 Plan. A new Town Plan was written by Research and Evaluation Specialists of Vermont (RESV) and adopted by the Town.
<b>1999</b>	General updates to the Town Plan were made to reflect changes in the community and its vision.
<b>2004</b>	General updates to the Town Plan were made to reflect changes in the community and its vision.
<b>2005</b>	Town Plan updated to assess current conditions in the town and to develop goals, objectives and recommendations that would lead to the implementation of the Plan. During this process Residents were asked to complete a questionnaire, participate in Public Forums and to join Sub-Committees as avenues to provide input.
<b>2010</b>	The Plan <u>was</u> updated once again to reflect general changes in the community
<b>2015</b>	<u>The Plan is updated with the assistance of a Municipal Planning Grant. The Plan is restructured to incorporate language regarding flood resiliency, a new statutory requirement, and the incorporate public input collected from the Vermont Council on Rural Development's Community Visit process. Northwest Regional Planning Commission aided the Town and Village of Swanton in this update.</u>

Deleted: ¶  
¶

Deleted: 09  
Deleted: is

This Plan contains a vision of Swanton fifteen years from now. It includes goals, objectives and recommendations to ensure that the goals of the Town are achieved. Before discussing the Town's existing condition, the Plan describes its future goals for a variety of areas including: land use; transportation; community facilities and services such as fire and police protection and park improvements; educational facilities and services; significant natural features; historic, cultural and archeological resources, energy and economic development.

Deleted: in

The Plan then presents a set of implementation strategies (Chapter 5) to ensure that the goals and vision of Swanton are obtained. These strategies are based on the input of residents, various local interest groups, public officials, members of the Planning Commission and Select Board and staff of regional and state organizations.

The Plan then provides a summary of existing conditions. It presents population and housing trends, discusses significant natural features, and examines local government including revenue and expenditure trends. This section of the Plan is supported by referenced material and data (some of which has been placed in the appendices).

The plan also contains a summary of the compatibility of the proposed land use areas in the plan with proposed land use areas for adjoining communities. It is important to remember that the changes that occur over the next several years may have an impact on adjoining communities. Swanton is sensitive to its neighbors and committed to cooperate mutually on regional planning issues.

A list of the historic sites and structures as recorded with the Division for Historic Preservation has been added as an appendix to the plan.

**Deleted:** some

**Deleted:** the

**Deleted:** Chapter 7

**Deleted:** Swanton's land and

**Deleted:** its

**Deleted:** Appended on the end of the document is a

**Deleted:** . It should be noted that numerous resources were used to compile this Plan of which are on file in the Swanton Zoning and Planning Office.

## CHAPTER 3

❦

# BACKGROUND

---

### A. BRIEF HISTORY

Swanton Town and Village are situated on the Missisquoi River and Lake Champlain near the New York and Canadian borders. Swanton has a rich cultural heritage--with evidence of Native Americans camping in the area as early as 6,000 B.C. The Abenakis hunted, fished and camped near the Missisquoi River. The earliest confirmed date for an Abenaki village is 1682. The French were next to settle this area in pursuit of the rich marble deposits and timber resources.

Swanton is a typical early settlement--the town grew around the area of the Taquahunga Falls (site of the current dam in Swanton) on the Missisquoi River. The settlement patterns today are largely attributed to the natural features and the past hunting and gathering practices of early settlers. Until the mid 1800's, water transportation was the primary means of moving goods and services to Burlington, Montreal, and New York City.

Sawmills were established along the waterways to process and transport lumber products. In 1860, a railroad was constructed through Swanton to Maquam Bay and a facility was constructed for the interchange of goods from water to rail. Through the late 1800's several railroad lines provided important links to Canada and other parts of Vermont. These railroads were used to transport freight as well as passengers. Rail continued to be the major form of transportation until Interstate 89 was completed in the early 1970's, but rail travel is still part of Swanton today. The main line of the Central Vermont Railway follows the Route 7 and 78 corridors. Both passengers and freight are transported on this line. Wood chips also are transported from Swanton to Burlington Electric.

Today, Swanton is a rural community relying heavily on its agricultural and manufacturing heritage and natural features including Lake Champlain, the Missisquoi National Wildlife Refuge, and the Missisquoi River. The Town is at the hub for the transport of goods and services to Canada, New York, and other areas of Vermont. Swanton has a variety of business and industry, including cheese production, food products, machine tools, mining, castings, and computerized labeling.

The population of Swanton is diverse. A high proportion of the seasonal population resides in West Swanton. Swanton is the home of the Abenaki Nation of Vermont. The Abenakis continue to play a strong role in community activities. The Abenaki Tribal Council and the Abenaki Self Help Association have established a Learning Center and a Housing Project. Recent efforts include a health center, an employment program, and a summer lunch and activity program.

**Comment [TN4]:** Want to add anything here regarding biking or tourism?

Swanton is working hard to bring additional industrial development to appropriate locations in the Town. Volunteerism and a strong sense of community spirit are prevalent throughout.

**CHAPTER 6**  
**SWANTON TODAY**  
**SUMMARY OF EXISTING CONDITIONS**

---

To effectively chart the future, it is important to understand the existing conditions, issues, and opportunities of Swanton today. The primary purpose of this section is to provide the reader with an adequate understanding of various characteristics and trends of the Town such as population, housing and fiscal characteristics. This discussion will also provide a solid foundation for the goals and recommendations presented elsewhere in this Plan.

**A. POPULATION CHARACTERISTICS AND TRENDS**

**Population Trends**

The population in Swanton has doubled between 1940 and 2010, Swanton Village had fewer persons than the balance of the Town in 1940. Between 1940 and 1950, the Village annexed an area and associated population so that by 1950, the Village contained more persons than the balance of the Town. From 1950 to 1960, the Village and the balance of the Town grew by equal amounts. Beginning in 1960, Village growth began to level off, while Town growth started to steadily increase. Between 1980 and 2010 the Town increased by almost 1,400 people, while the Village population decreased. The growth in the Town as opposed to the Village might be attributed to several factors including the availability of land area in the Town to accommodate additional residential growth, the desire to have larger lots, and improved ability to commute to employment centers since the 1970s. Another factor slowing growth in the Village is the lack of undeveloped land.

Based on census data, Swanton increased by 224 people or by about 3.6% from 2000 to 2010. This is a much slower rate than has been seen in previous decades, but reflects a statewide trend. Population estimates from the 2009-2013 American Community Survey indicate that Swanton has lost population since 2010. However, it should be noted that the Census is a much more accurate than the estimates provide by the American Community Survey. The population estimate from the 2009-2013 American Community Survey contains a considerable margin of error (plus or minus 20 persons).

Population projections from the Vermont Agency of Commerce and Community Development indicate that Swanton will grow at a higher rate through 2030 at approximately five percent each decade.

Deleted: increased

Deleted: 00

Deleted: The population growth trends are linear, but the rate of increase changed markedly at about 1960. Between 1940 and 1960, Swanton Town as a whole experienced an increase in population of 403 people (20 persons per year) (Table 6.1). Between 1960 and 1970; however, Swanton increased in population by almost 17%, a change from a steady 6% increase during each of the previous decades.

Deleted: 567

Deleted: 10

Deleted: 1990

Deleted: 0

Deleted: Census

Deleted: slower

Deleted: 2

Deleted: ,

Deleted: and a half

**Table 6.1 - Population Trends for Swanton Town and Village, Franklin County and Vermont (1940 - 2030)**

Year	Swanton Town	Swanton Village	Total Town and Village	Swanton Total % Change	Franklin County	% of County Population	Vermont
1940	2,082	1,461	3,543	x	29,601		359,231
1950	1,465	2,275	3,740	5.6%	29,824	12.5%	377,747
1960	1,556	2,390	3,946	5.5%	29,474	13.4%	389,811
1970	1,992	2,620	4,622	16.9%	31,282	14.8%	444,732
1980	2,621	2,520	5,141	11.5%	34,788	14.8%	511,456
1990	3,276	2,360	5,636	9.6%	39,980	14.1%	562,758
2000	3,655	2,548	6,203	10.1%	45,417	13.7%	608,827
2010	4,041	2,386	6,427	3.6%	47,746	13.5%	625,741
2013 (est.)	3,943	2,480	6,423	-0.1%	48,019	13.4%	625,904
2020 (proj.)	x	x	6,773	5.4%	51,810	13.1%	653,575
2030 (proj.)	x	x	7,101	4.8%	55,647	12.8%	670,073

Source: 1940, 1950, 1960, 1970, 1980, 1990, 2000, 2010 U.S. Census. 2009-2013 American Community Survey (ACS). Vermont Population Projections 2010-2030 (Vermont Agency of Commerce and Community Development - Scenario A)

Deleted: ¶  
Table 6.1

Formatted: Font: Calibri, 11 pt, Font color: White

Formatted Table

Formatted Table

Swanton Village had fewer persons than the balance of the Town in 1940. Between 1940 and 1950, the Village annexed an area and associated population so that by 1950, the Village contained more persons than the balance of the Town. From 1950 to 1960, the Village and the balance of the Town grew by equal amounts. Beginning in 1960, Village growth began to level off, while Town growth started to steadily increase. Between 1980 and 2010, the Town increased by almost 1,400 people, while the Village population decreased. The growth in the Town as opposed to the Village might be attributed to several factors including the availability of land area in the Town to accommodate additional residential growth, the desire to have larger lots, and improved ability to commute to employment centers since the 1970s. Another factor slowing growth in the Village is the lack of undeveloped land.

Deleted: Looking at Swanton's total population, the

Deleted: 00

Deleted: 034

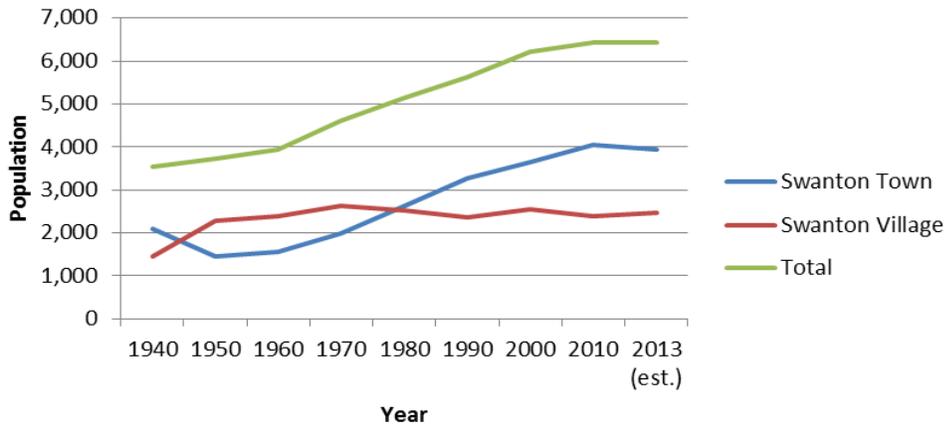
Deleted: only increased by 28 people

Deleted: existence

Deleted: Figure 6.1 illustrates graphically the population growth trends in Swanton Town and Village

Deleted: .

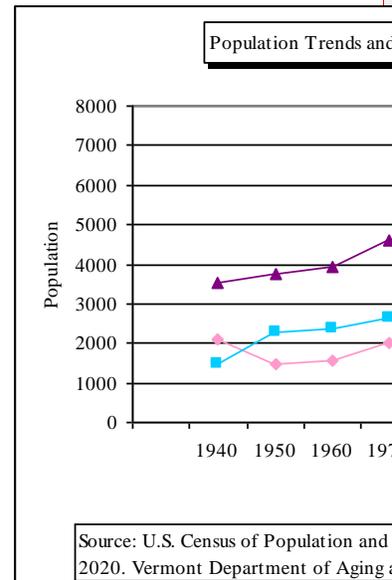
**Figure 6.1 - Population Trends in Swanton**



During the summer months, Swanton sees an influx of seasonal residents. Although it is impossible to accurately estimate seasonal residents, the 2010 Census notes that there are 253 housing units in the community used for seasonal, recreational, or occasional use. This influx of seasonal residents has a significant impact on Swanton's local economy.

As shown Figure 6.2, Swanton has not experienced the extreme growth spurts like some nearby towns in Franklin County. Growth spurts in the Region diminished between 2000 and 2010, yet there is continued, steady growth in Swanton and in Franklin County.

Deleted: Figure 6.1



Deleted: Swanton's summer residents make up a significant proportion of the population. It is estimated that the population of Swanton increases by approximately 26% of the total population during the summer months. The estimated 1,601 summer residents are derived from the 593

Deleted:

Deleted: dwellings, travel trailers, and an average household size of 2.7 persons per household.

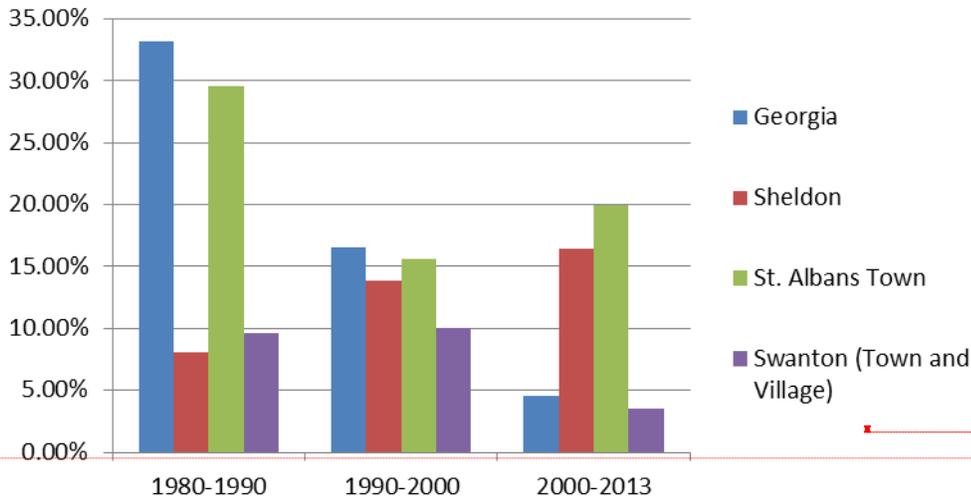
Deleted: population

Deleted: high

Deleted: that

Deleted: the adjacent towns of Sheldon and St. Albans have. Franklin County as a whole was the third fastest growing county in the State between 1990 and 2000. Based on these comparisons and the population projections for the County and Town, other Franklin County towns will likely continue to make up a greater proportion of the County's population growth.

**Figure 6.2 - Percentage Population Growth 1990-2010**



Deleted: Figure 6.2

Formatted: Font: Calibri, Not Bold

Formatted: Normal, Don't keep with next

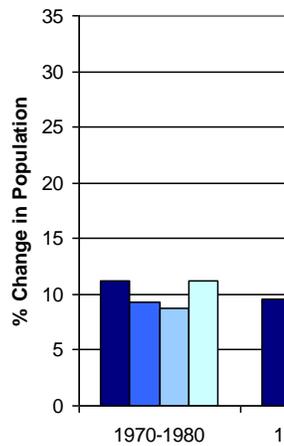
Deleted:

Swanton, like the County and State, has seen a decline in the population of school age children between 2000 to 2013. This has affected school enrollment numbers. Simultaneously, Swanton has seen a rise in the percentage of the population above 45 years of age, and particularly those over 65 years of age. Again, this reflects trends in Franklin County and in Vermont. The median age in Swanton in 2013 was over 40 years old.

**Table 6.2: Population by Age Group as a Percentage of Total Population in Swanton and Franklin County (1960 to 2000)**

Age Group	Swanton		Franklin County	
	2000	2013	2000	2013
Under 5 years	7.2%	6.2%	7.1%	6.2%
5 - 9 yrs	8.4%	5.6%	8.2%	6.5%
10 - 14 yrs	7.2%	7.0%	9.2%	6.9%
15 - 19 yrs	7.2%	7.3%	7.0%	6.9%
20 - 24 yrs	5.0%	5.6%	4.8%	5.1%
25 - 29 yrs	5.7%	4.4%	6.0%	5.6%
30 - 34 yrs	6.6%	5.8%	7.6%	6.3%
35 - 39 yrs	8.7%	7.8%	9.1%	6.9%
40 - 44 yrs	8.1%	7.2%	8.7%	7.3%
45 - 49 yrs	7.1%	8.1%	7.7%	8.2%
50 - 54 yrs	7.4%	7.5%	6.4%	8.3%

**Percent Changes in Population**



Deleted:

Deleted: has experienced a decline in the percentage of the population aged 0-14 years between 1960 and 2000. During the same period, the age group 15-24 remained at approximately the same proportion in 2000. The age group 25-34 increased steadily through 1980 and then decreased back to approximately the same proportion in 2000. The age group 35-54 has increased steadily betw(...

Deleted: ¶  
Table 6.2

55 - 59 yrs	5.8%	8.1%	5.1%	7.4%
60 - 64 yrs	3.5%	4.9%	3.4%	5.9%
65+ yrs	12.2%	14.3%	10.9%	12.7%
Median Age	35.7	40.2	36.7	39.7

Data Source: 2000 U.S. Census of Population and Housing; 2009-2013 American Community Survey (ACS)

## B. HOUSING CHARACTERISTICS AND TRENDS

### Household Characteristics

In 2013, Swanton had a total of 2,576 households (Table 6.3). Seventy percent of the occupied housing is owner occupied while approximately 30% is renter occupied. Swanton, similarly to other towns in Franklin County and Vermont, has experienced a decline in the number of persons per occupied housing unit between 1970 and 2013. In 1970, the average was 3.3 persons per occupied housing unit. This has declined to an average of 2.49 persons per occupied housing unit in 2013.

**Table 6.3: Housing Characteristics in Swanton and Franklin County (1990 - 2013)**

Housing Characteristic	1990		2000		2013	
	Swanton	Franklin County	Swanton	Franklin County	Swanton	Franklin County
Total Housing Units	2,423	17,250	2,689	19,191	2,934	21,687
Total Households	2,026	14,326	2,329	16,765	2,576	18,616
Person per Occupied Unit	2.8	2.8	2.7	2.7	2.49	2.55
Owner Occupied Units	1,533	10,390	1,750	12,582	1,827	14,170
Renter Occupied Units	493	3,936	579	4,183	749	4,446
Family Households	1,572	10,705	1,701	12,194	1,757	12,880

Source: 1990, 2000 U.S. Census of Population and Housing; American Community Survey 2009-2013.

According to the 2009-2013 American Community Survey, of the 2,576 households, 1,757, or 68% are family households (2 or more persons living together as a housekeeping unit).

The median household income in Swanton in 2013 was \$54,551. This is slightly below Franklin County's median of \$56,240. The median family income in Swanton in 2013 was \$64,495, which is below the County figure of \$68,408. Non-family households in Swanton reported a median household income of \$40,087. This is greater than the County figure of \$34,213.

Approximately 12.8% of all families in Swanton Town and 13% of all families in Swanton Village had incomes in 2013 below the poverty level. The County had 7.7% of families

Deleted: ¶  
Population by Age Group as a Percentage of Total Population in Swanton and Franklin County (1960 to 2000)

Deleted: 00

Deleted: 329

Deleted: with an average of 2.7 persons per household. As reported in Table 6.3, the household size in Swanton is virtually the same as that of Franklin County.

Deleted: -five

Deleted: ed

Deleted: one quarter

Deleted: ¶

¶  
Table 6.3

Deleted: Swanton, similar to other towns in Franklin County and Vermont, has experienced a decline in the number of persons per occupied housing unit between 1970 and 2000. In 1970, the average was 3.3 persons per occupied housing unit. This has declined to an average of 2.7 persons per occupied housing unit in 2000. ¶

Deleted: 0 U.S. Census (Summary file 1, 100% data),

Deleted: 329

Deleted: 01

Deleted: 73

Deleted: Forty percent of these family households are two person and 43% are three and four person households.<sup>4</sup> Of the 1,724 family households, 1,366 or 79% are married couple families. Of the remaining family households, 259 are female-headed households, and 99 are male-headed

Deleted: 1999

Deleted: 41,086

Deleted: 41,659

Deleted: 1999

Deleted: 45,810

Deleted: slightly

Deleted: 46,733

Deleted: Among the 17 towns in Franklin County

Deleted: 20,644

Deleted: Both are below the

Deleted: 24,328

Deleted: 6.3%

Deleted: 8.5%

Deleted: 1999

reporting incomes below the poverty level in 2013. Families below the poverty level only account for 6.3% of families in the Town and 8.5% of families in the Village in 1999.

### Housing Stock

Swanton has a variety of housing unit types including single family detached and attached units, multi-family units, mobile homes, camps and travel trailers. Single-family detached units make up the largest portion (69.67%) of total dwelling units (Table 6.4). The second largest dwelling unit type is the 2-4 unit structures at 11.45%, with mobile homes following close behind at 11.11%.

**Deleted:** The County had 7% of families reporting incomes below the poverty level. ¶

**Deleted:** It is important to point out that travel trailers were not enumerated by the U.S. Census in 2000. Based on the Town's grand list in 2003, there were 285 travel trailers. ¶

**Deleted:** 70.3

**Deleted:** mobile home

**Deleted:** 5

**Deleted:** 2 - 4 unit structures

**Deleted:** 2

**Deleted:** The number of mobile homes in Swanton has a sizable influence on the County numbers-- sixteen percent of the mobile homes in the County are located in Swanton.

**Table 6.4: Housing Units by Type in Swanton and Franklin county (1990 - 2013)**

	Swanton						Franklin County					
	1990		2000		2013		1990		2000		2013	
	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%
Single unit detached	1,516	62.6%	1,891	70.3%	2,044	69.7%	11,456	66.4%	13,581	70.8%	15,635	72.1%
Single unit attached	12	0.5%	27	1.0%	52	1.8%	161	0.9%	363	1.9%	552	2.5%
2-4 unit structure	315	13.0%	302	11.2%	336	11.5%	2,571	14.9%	2,353	12.3%	2,214	10.2%
5-9 unit structure	48	2.0%	52	1.9%	99	3.4%	495	2.9%	450	2.3%	604	2.8%
10+ unit structure	32	1.3%	57	2.1%	0	0.0%	336	1.9%	346	1.8%	682	3.1%
Mobile Home	500	20.6%	309	11.5%	326	11.1%	1,817	10.5%	1,957	10.2%	2,000	9.2%
Boat, RV, van, etc.	0	0.0%	51	1.9%	0	0.0%	414	2.4%	141	0.7%	0	0.0%
<b>Total Housing Units</b>	<b>2,423</b>	<b>100.0%</b>	<b>2,689</b>	<b>100.0%</b>	<b>2,934</b>	<b>100.0%</b>	<b>17,250</b>	<b>100.0%</b>	<b>19,191</b>	<b>100.0%</b>	<b>21,687</b>	<b>100.0%</b>

Source: 1990, 2000 U.S. Census of Population and Housing Summary File 3, based on a sample population and configured to represent the total population

**Deleted:** Table 6.4¶

The number of mobile homes in Swanton has a sizable influence on the County numbers—16% of the mobile homes in the County are located in Swanton. The number of mobile homes in Swanton more than tripled between 1970 and 1990, from 164 to 500; since then, the number of mobile homes being added to the housing stock has slowed and mobile homes have decreased as a percentage of the total housing stock.

**Deleted:** Based on the 2000 U.S. Census, t

**Deleted:** however from 1990 to 2000 the number of mobile homes decreased by 38%

**Deleted:** It is not clear what proportion, if any, are classified as year-round or seasonal. According to the 2000, U.S. Census, approximately three-quarters (76%) of the mobile homes are owner - occupied.

**Deleted:** , an increase from

**Deleted:** to 2,689 in 2000.

**Deleted:** 2000 U.S. Census

**Deleted:** 1.5%

**Deleted:** (Table 6.5)

As presented in Table 6.5, Swanton's housing stock has steadily increased over the last two decades. Total housing units equaled 1,674 in 1970. This has increased to 2,934 total housing units in 2013. According to the 2009-2013 American Community Survey, 128 units of Swanton's housing stock is reported to be seasonal dwellings. This is a dramatic decrease from the 308 seasonal units documented in the 2000 Census. This severe difference may be due in part to the large margin of error associated with the American Community Survey (+ or - 84 units). The number of seasonal units is one of the few pieces of housing data that was still collected in the 2010 Census. According to the 2010 Census, there were 253 seasonal units in Swanton. This appears to be more accurate than the 2009-2013 American Community Survey data.

**Deleted:** This is slightly over the County's seasonal housing stock figure of 10%. The number of seasonal dwellings in Swanton declined between 1980 and 2000 from 336 to 308. The decline may be attributed to changing tax laws and the demand for year-round housing¶

**Table 6.5: Year-Round and Seasonal Dwellings in Swanton, 1970 - 2013**

Year	Year-Round Units		Vacant Units for Seasonal, Recreational or Occasional Use		Total Units
	Units	%	Units	%	Units
1970	1,435	85.7%	239	14.3%	1,674
1980	1,831	84.5%	336	15.5%	2,167
1990	2,123	87.6%	300	12.4%	2,423
2000	2,381	88.5%	308	11.5%	2,689
2010	2,700	91.4%	253	8.6%	2,953
2013	2,806	95.6%	128	4.4%	2,934

Source: U.S. Census of Population and Housing, 1970 – 2010; American Community Survey 2009-2013

Table 6.6 reports the value of owner occupied housing units in Swanton and Franklin County in 2000 U.S. Census and the value of a sample of owner occupied housing units in Swanton between 2009-2013 according to the American Community Survey. Owner occupied housing unit values have risen substantially since 2000. Approximately 48.8% of the owner occupied housing units in Swanton were valued between \$50,000 and \$99,000 in 2000. This decreased to 4.1% in 2013. The plurality of homes are in Swanton are now worth between \$150,000 and \$199,999 (31.6%). Additionally, 30.2% of homes in Swanton are worth between \$200,000 and \$299,999 in 2013, substantially higher than the 7% of homes within the same price range in 2000.

**Table 6.6: Percent Owner Occupied Housing Units by Value in Swanton and Franklin County (1990 - 2013)**

Value	Swanton			Franklin County		
	2000	2013	% Change	2000	2013	% Change
Less than \$50,000	1.90%	8.00%	321.05%	4.40%	6.10%	38.64%
\$50,000 - \$99,999	48.80%	4.10%	-91.60%	47.00%	6.00%	-87.23%
\$100,000 - \$149,999	34.80%	11.40%	-67.24%	35.30%	12.00%	-66.01%
\$150,000 - \$199,999	8.80%	31.60%	259.09%	9.00%	24.00%	166.67%
\$200,000 - \$299,999	7.00%	30.20%	331.43%	3.50%	37.40%	968.57%
\$300,000+	0.70%	14.80%	2014.29%	0.90%	14.50%	1511.11%
Total	100.00%		-	100.00%		-

Source: 2000 U.S. Census of Population and Housing; American Community Survey 2009-2013

The proportion of owner occupied housing units valued at below \$150,000 declined between 2000 and 2013, while the proportion of housing above \$150,000 increased during the same period.

**Housing Costs and Personal Income**

The price of housing in Swanton has generally followed the regional and statewide trends, increasing sharply over that last 13 years. According to the information from the Vermont

Deleted: Table 6.5  
Year-Round and Seasonal Dwellings in Swanton, 1970 - 2000

Deleted: of a sample

Deleted: 1999, according to the

Deleted: 49

Deleted: The comparative value for the County is 47%. Proportionally, Swanton has fewer owner occupied dwellings valued less than \$50,000 than the County as a whole (1.9% and 4.4%, respectively).

Deleted: ¶

Deleted: Table 6.6¶

Deleted: 0

Deleted: 1990 and 2000

Deleted: 0

Deleted: Specifically, owner occupied housing units between \$150,000 and \$299,999 more than doubled and units between \$100,000 and \$149,000 increased by over 80%.

Department of Taxes available on the Vermont Housing Data website, the the median sale price of a primary residence in Swanton in 2014 (\$168,000) was below that of Franklin County (\$177,000) and the state as a whole (\$195,000). The Swanton median sale price increased by over 8.4% between 2004 to 2014. This is a considerably lower than the increase in median sale price between 1999-2009 (55.4%). Median sale prices in the County and the State both increased by 14.2% and 18.5% respectively during the 2004-2014. The median sale price in 2014 was higher in St. Albans Town (\$213,450) than Swanton. However, Swanton had a higher median sale price in 2014 than neighboring town of Sheldon (\$150,750), and Highgate (\$150,000).

Table 6.7 displays Swanton households by annual income. It is interesting to note that there are approximately 565 households making less than \$25,000 per year. This income level is below 50% of the median household income. Conversely, the number of households making over \$200,000 has more than doubled between 2000 (23 households) and 2013.

Median income (dollars)	54,551	
Income	Number	Percent
Less than \$10,000	178	6.9%
\$10,000 to \$14,999	129	5.0%
\$15,000 to \$24,999	258	10.0%
\$25,000 to \$34,999	183	7.1%
\$35,000 to \$49,999	399	15.5%
\$50,000 to \$74,999	600	23.3%
\$75,000 to \$99,999	252	9.8%
\$100,000 to \$149,999	402	15.6%
\$150,000 to \$199,999	59	2.3%
\$200,000 or more	116	4.5%
<b>Total</b>	<b>2,576</b>	<b>100.0%</b>
Source: 2009-2013 American Community Survey		

### Affordable Housing

High housing costs place a greater strain on lower income households. Affordable housing programs emphasize the importance of providing affordable housing to households that are substantially below the median income of the area.

According to Vermont Statute, housing is considered affordable when a household earning not more than 80 percent of the county median income or the metropolitan statistical area's median income, if it applies, pays no more than thirty percent of their income on housing. This applies to both rentals and owner occupied housing units.

All municipalities in Franklin County are deemed part of the Burlington-South Burlington Metropolitan Statistical Area (MSA) by the U.S. Department of Housing and Urban Development. The figures for median income, however, do not paint an accurate picture for many of the municipalities within Franklin County, including Swanton. The 2014 median household income for the Burlington-South Burlington MSA was \$61,763, while it was \$56,240 in Franklin County (2009-2013 ACS). In addition, median household income for Swanton from ACS (\$54,551) was not used in recognition that housing markets do not exist in a bubble and but rather exist on a regional level. For this reason, the Northwest Regional Planning Commission uses the county median household income to compute housing affordability.

- Deleted:** than on households that are economically better off
- Deleted:** Therefore, a
- Deleted:** initiatives
- Deleted:** generally
- Deleted:** at or
- Deleted:** ¶
- Deleted:** The price of housing in Swanton has generally followed the regional and statewide trends, increasing sharply over that last 10 years. According to the Vermont Housing Data website in 2008 the median sale price of a primary residence in Swanton (\$158,000) was below that of Franklin County (\$175,900) and the state as a whole (\$200,000). The Swanton median sale price increased by over 70% over that last 10 years, while the median sale prices in the County and the State both increased by over 80% during the same period. When compared with other local housing markets, including St. Albans Town (\$222,900), Sheldon (\$179,000), and Highgate (\$160,000), Swanton appears to be a more affordable community in which to buy a home. ¶
- Deleted:** .
- Deleted:** 1999
- Deleted:** 46,732
- Deleted:** 41,659
- Deleted:** 2000 US Census
- Deleted:** statistics

**Table 6.8: Homeownership Affordability in Swanton**

Percent of Franklin County Median Household Income	30% of Income		Taxes and Insurance	Income Available for Housing/Month	5% Down Payment	Maximum Affordable Mortgage	Median Sale Price for Primary Residences in Swanton (2014)	Affordability Gap
	Per Year	Per Month						
100%	\$56,240	\$1,406	\$451	\$955	\$8,425	\$193,243.50	\$168,000	\$25,244
80%	\$44,992	\$1,125	\$451	\$674	\$8,425	\$133,862.16	\$168,000	-\$34,138
50%	\$28,120	\$703	\$451	\$252	\$8,425	\$44,790.14	\$168,000	-\$123,210
30%	\$16,872	\$422	\$451	-\$29	\$8,425	-\$14,591.20	\$168,000	-\$182,591

Data Source: Median income based ACS 2009-2013 estimates; taxes and insurance are an estimate; median sale price for primary residences in Swanton was obtained from the Vermont Department of Taxes; Taxes and Insurance estimates are from the Vermont Housing Finance Agency (VHFA); all other figures computed by the NRPC. Maximum affordable mortgage rates include a 4% mortgage rate.

Table 6.8 shows the affordability gap – the difference between the maximum affordable mortgage and the median sale price for primary residences in Swanton. According to the analysis, Swanton provides affordable homeownership opportunities for those making 100% of the County median income purchasing a home at the median sale price. However, for those families making 80% or less than the median income, a home in Swanton at the median sale price is not affordable.

A similar affordability analysis can be completed for rental housing affordability (Table 6.9). According to the analysis, median gross rent (including utilities) is affordable for those making both the county median income and 80% of the county median income. The median gross rent has risen sharply since 2000 when it was reported at \$541, meaning that median gross rents have increased by over \$300 in 13 years.

**Table 6.9: Rental Affordability in Swanton**

Percent of Franklin County Median Household Income	30% of Income		Income Available for Rent/Month	Median Gross Rent - Swanton	Affordability Gap
	Per Year	Per Month			
100%	\$56,240	\$1,406	\$1,406	\$845	\$561
80%	\$44,992	\$1,125	\$1,125	\$845	\$280
50%	\$28,120	\$703	\$703	\$845	-\$142
30%	\$16,872	\$422	\$422	\$845	-\$423

Data Source: Median income and median rent based on ACS 2009-2013 estimates; all other figures computed by the NRPC.

**Deleted:** 7

**Deleted:** , which is t

**Deleted:** is

**Deleted:** Low income households could afford a mortgage with monthly payments that did not exceed 30 percent of their monthly income. In Franklin County, this equated to a mortgage of not more than \$104,372. This figure is higher than the 1999 median sale price for single-family dwellings of \$99,900. For those with an income below 80% of the median, owning a home became unaffordable. Until the 2010 U.S. Census is released, there is limited data available for computing current affordability statistics. While it is known that sale prices of homes have increased sharply, there are no current household income figures. Based on individual income statistics from tax returns, it is estimated that household income has increased at a lower rate than home sale prices and therefore homeownership has become less affordable since 2000. However, the economic downturn that occurred in 2009 has compounded the issue, making an accurate analysis at the local scale more complicated.

**Deleted:** ¶

¶

**Deleted:** ¶

**Deleted:** Table 6.7¶

**Deleted:** Table 6.8¶

**Deleted:** R

**Deleted:** can be more affordable than home ownership in Swanton; however, the cost of rental housing is on the rise. Affordable rent is defined by the State of Vermont as rent plus utilities.

**Deleted:** According to the 2000 U.S. Census, the median contract rent in Swanton was

**Deleted:** 431

**Deleted:** and the median gross rent was \$511, leaving the median cost of utilities to be \$80

**Deleted:** About 49% of the median income could afford the 2000 median gross rent in Swanton.

**Deleted:** ¶

Table 6.8 divides Swanton households by annual income. It is interesting to note that there are approximately 467 households below 50% of the median household income, none of which could afford the 2000 median home price or the 2000 median contract rent by quite a margin. Mobile homes offer an affordable option for households that cannot afford home ownership. In Swanton, the 2008 median price for a mobile home with land was \$97,500 and without land was \$42,500. Assuming tax and insurance rates are the same for houses as they are for mobile homes, about 62% of Swanton's median income could afford the median mobile home price with land.¶

**Senior Housing**

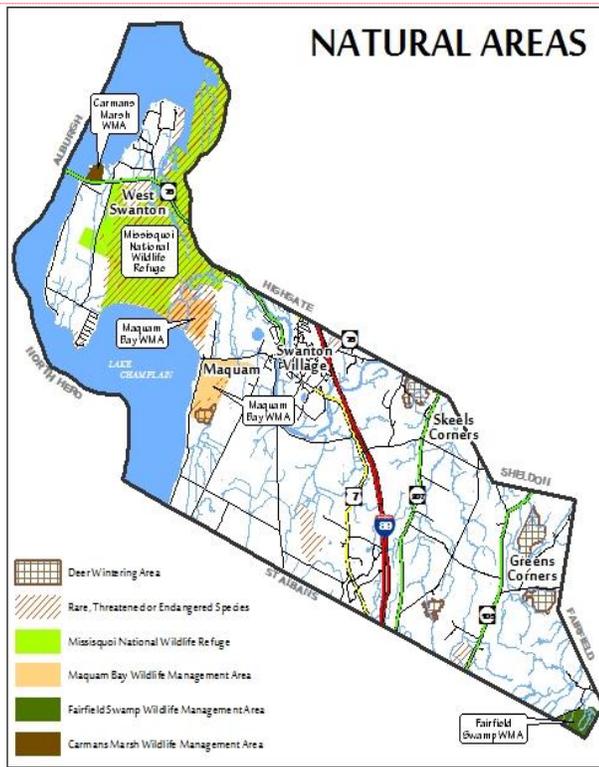
Currently, Swanton has 68 units of housing dedicated to seniors located within 4 complexes. Three complexes have rental assistance available through USDA Rural Development or the Vermont State Housing Authority. Twelve of the units are handicap/wheelchair accessible. Per the Vermont Housing Needs Assessment release by the Vermont Agency of Commerce and Community Development, there is anticipated to be an increased need for senior housing in Franklin County, and in the rest of Vermont, in the near future due to the aging of the babyboom generation. Steps should be taken to ensure that there is adequate and affordable housing available for senior citizens.

- Deleted: ¶
- Deleted: the town of
- Deleted: 4
- Deleted: senior housing
- Deleted: 3
- Deleted: in the Village
- Deleted: All of the units
- Deleted: Six
- Deleted: As of March 2010, all units were occupied with waiting lists as long as 2 years.
- Deleted: This indicates that the supply of senior housing is not currently meeting demand. Because the population is aging as a whole, s
- Deleted: need to
- Deleted: <object>

**C. SIGNIFICANT NATURAL FEATURES**

Map 6.1

Swanton is fortunate to have some of the most diverse natural environments found in this region. The Missisquoi National Wildlife Refuge, a 6,000 acre wildlife preserve, is predominantly located in West Swanton but also extends into the Town of Highgate. Much of Swanton is relatively flat with several wetland areas. The upland areas of Swanton converge to several valleys and tributaries feeding into the Lake Champlain Basin. The southeastern corner of Swanton is somewhat hilly and forested. Much of the center of Swanton both east and west of I-89 and in West Swanton remains in active farming. Approximately 60 percent of the soils in Swanton meet the State’s definition of primary agricultural soils. The following is a discussion of the various natural features in Swanton.



**Natural Areas and Wildlife Habitat**

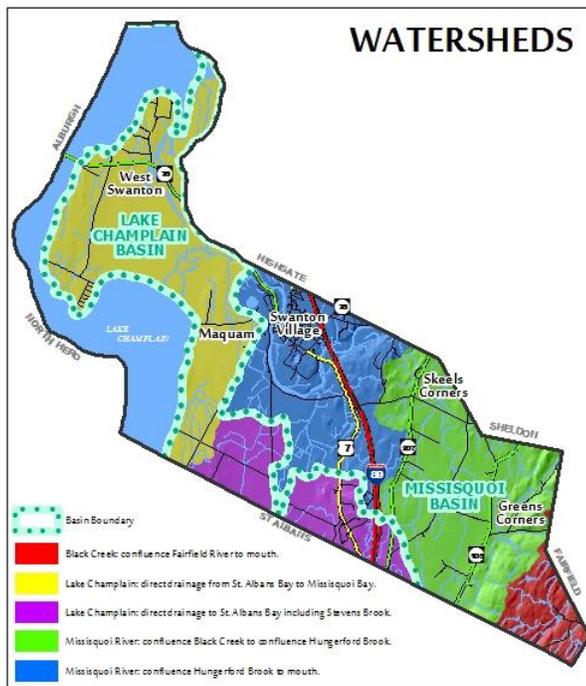
Biological diversity can be found in a number of habitat areas in Swanton. Selected habitats are regarded by the Vermont Agency of Natural Resources as biological areas of statewide

- Deleted: The b

significance. Map 6.1 illustrates

critical habitat for statewide rare, threatened, or endangered species. For the most part, these areas are under state or federal jurisdiction including such areas as the Missisquoi National Wildlife Refuge, the Missisquoi River, the Fairfield Swamp State Wildlife Management Area, and Lake Champlain. The Missisquoi National Wildlife Refuge is one of the largest and most significant wildlife protection areas in the northeast. The Vermont Fish and Wildlife Department controls approximately 2.5 miles of Maquam Bay shoreline (Lake Champlain). Several miles of the shoreline on the Missisquoi Bay fall under protection of the U.S. Fish and Wildlife Service. Map 6.1 also shows several deer wintering yards mapped by the Vermont Department of Fish and Wildlife.

Map 6.2



### Water Resources – Rivers

Swanton is situated within the Lake Champlain and Missisquoi Basins. The local rivers and streams which feed into Lake Champlain and Missisquoi Bay include the Missisquoi River, Jewett and Hungerford Brooks, Maquam, First and Charcoal Creeks and Fairfield Pond. The Missisquoi River is the largest river in Swanton. There is a large delta at the mouth of the Missisquoi River where it empties into Missisquoi Bay, which is rich in biological diversity and contains critical habitat areas. The watersheds in Swanton are shown in Map 6.2.

River flooding is a concerning in Swanton. Swanton directly address flooding in its Land Development Regulations. The regulations control development in the Special Flood Hazard Area (SFHA), or 100-year floodplain, as delineated by FEMA on the Town's Flood Insurance Rate Maps (FIRM). These regulations are designed to minimize the impact of flooding due to inundation caused by flood waters. It is important to note that the existing FIRMs are dated as effective on March 16, 1983 in the Village of Swanton and on April 18, 1983 in the Town of Swanton. The FIRM has been digitized by the Northwest Regional Planning Commission to assist in planning efforts and are used to determine approximate locations. The digital version is not used for regulatory rulings.

Comment [TN8]: Revisit Section w/Flood Resiliency

Deleted: ¶

All adopted flood hazard regulations meet or exceed minimum requirements set by the National Flood Insurance Program. Adoption of flood hazard regulations and the FIRM allows the Town to be a member of the National Flood Insurance Program (NFIP) and enables all residents of Swanton to purchase flood insurance.

Swanton has also addressed fluvial erosion in the Swanton Land Development Regulation. Fluvial erosion is erosion caused by rivers and streams that can lead to bank erosion and changes to river and stream channel location. The Vermont Agency of Natural Resources has provided Swanton with Fluvial Erosion Hazard Maps for the Missisquoi River and Hungerford Brook, a river and a stream that are susceptible to fluvial erosion. The maps provided by the Agency of Natural Resources were used as the basis for establishing vegetated buffers from all rivers and streams in Swanton per the Swanton Development Regulations adopted in 2014. A 50 foot vegetated buffer is required from all rivers and stream in Swanton. The required buffer is larger for the Missisquoi River (100 foot buffer) and Hungerford Brook (75 foot buffer). The buffers were adopted to mitigate future risk to structures and humans due to fluvial erosion. The buffers will also minimize future erosion of stream and river banks and enable rivers room to meander and function in their natural state. Swanton has not adopted River Corridors as defined by the State Agency of Natural Resources.

### Water Resources – Lake Champlain

The water quality of Lake Champlain and its tributaries are threatened from nutrient and sediment loading from various sources, including stormwater and farm run-off and failing wastewater systems. Improving the water quality of Lake Champlain, particularly in the Northern bays of the lake, has become a priority at local, state and international levels. Current nutrient levels have increased the frequency and the extent of blue-green algae in Lake Champlain, particularly Missisquoi Bay. Blue-green algae can be harmful to both humans and pets.

On August 26, 2002, the Missisquoi Bay Agreement was signed between Vermont and Quebec regarding phosphorus reduction in the Missisquoi Bay Watershed. The agreement states that Vermont holds 60% of the responsibility for reducing phosphorus loads in the Bay, while Quebec holds 40%. The target phosphorus load for Vermont is 58.3 metric tons per year (mt/yr) and the target load for Quebec is 38.9 mt/yr. These amounts were based on a report by the Quebec-Vermont Missisquoi Bay Phosphorus Reduction Task Force. The agreement was a priority of the Lake Champlain Management Plan, *Opportunities for Action*, which is being implemented by the Lake Champlain Basin Program; and the Lake Champlain Phosphorus Total Maximum Daily Load (TMDL) Implementation Plan, which establishes maximum allowable phosphorus loads from each sub-watershed of Lake Champlain. The TMDL plan outlines a range of actions that will be necessary in the Vermont portion of the Missisquoi Bay to achieve maximum phosphorus loads. As of 2015, the target phosphorus loads outline in the Missisquoi Bay Agreement have not been achieved.

Deleted: ¶

Comment [TN9]: Revisit Section w/Flood Resiliency

Deleted: <object>

Deleted: ,

Deleted: ,

Deleted: septic

Deleted: and

Deleted: B

Deleted: an agreement

Deleted: ¶  
¶

Deleted: designations

Deleted:

The State of Vermont, in coordination with the Federal Environmental Protection Agency (EPA), is currently developing a revised TMDL for Lake Champlain. The revised TMDL will include a new restoration plan that will address the increased phosphorus levels in Lake Champlain. It is anticipated that the TMDL will be approved by the EPA in June 2015.

**Deleted:**

Severe flooding in the spring of 2011 on Lake Champlain has created increasing concern about flood resiliency in Swanton. During the spring of 2011, flood waters on Lake Champlain reached a height of 103.27 feet above sea level (ASL) as measured at the USGS gage at the Echo Center in Burlington. This is the highest lake elevation ever recorded and is considerably higher than the base flood elevation (BFE) delineated by FEMA (102 feet). Lake Champlain was above the base flood elevation for approximately two months. Flood damage was exacerbated by waves caused by high winds which at times increased lake levels to approximately 106 feet.

**Comment [TN10]:** Revise before adoption.

**Deleted:** In January 2010, the Vermont Agency of Natural Resources issued a revised Phosphorus TMDL Implementation Plan, which lays out a strategy for achieving the phosphorus reduction targets.

**Comment [TN11]:** Should get Swanton specific data on damages, etc.

Per the Swanton Development Regulations, a 50 foot buffer is required from all lakes and ponds. The buffer is to remain vegetated in its natural state (except on Lake Champlain). These local buffer regulations are in addition to the buffer requirements enacted by the State Agency of Natural Resource in 2014 (the Vermont Shoreline Protection Act). State buffer requirements apply to all lakes and ponds greater than 10 acres in size. Lakes in Swanton greater than 10 acres in size include Lake Champlain, Fairfield Pond and Fairfield Swamp Pond.

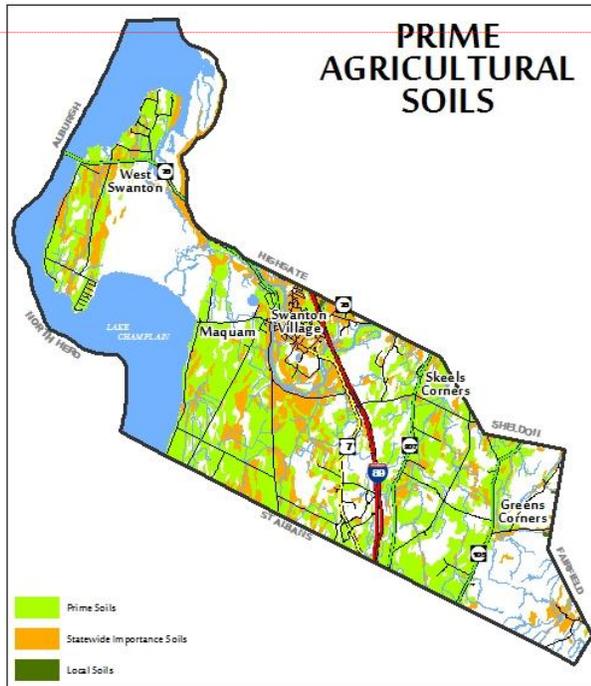
**Prime Agricultural Soils and Farmlands**

**Deleted:** The Plan identifies ten specific “next steps” which include expansion of technical and financial assistance to farmers, requirements for additional stormwater management, and technical and financial incentives for stream corridor protection and buffers. ¶

**Map 6.3**

Large proportions (60%) of the soils in Swanton are regarded as primary agricultural soils by the State of Vermont. While areas are classified as primary agriculture soils, seasonal wet conditions can affect their productivity. For the most part, the primary agricultural soils are contiguous, forming large pockets of soils that support large quantities of agricultural products.

Map 6.3 presents the primary and statewide significant agricultural soils in Swanton. These soils are located in three general areas: 1) West Swanton (running along Lake Champlain on both sides of Tabor Road and north to Campbell Bay; 2) on the west Route 7 and west to Maquam Road; and 3) in the vicinity of Highgate and Sheldon



**Deleted:** <object>

Roads running north and south to the Town boundaries.

The majority of the productive cropland in Swanton is located in the Middle Road area, while large woodland tracts and areas in pasture were located in the eastern parts of Swanton Town. According to the 2009 Grand List, there were 55 parcels of land categorized as farms within the Town. Given that some parcels are likely used by the same farm, the number of farms is estimated to be fewer than 55. As a comparison, there are 82 parcels in Swanton that are currently enrolled in the Current Use Appraisal program. This includes parcels that are enrolled in the program as that are composed as either forest or agriculture. Approximately, 12,687 acres are currently enrolled in the program including 9,809 acres enrolled as agriculture. The Town of Swanton should continue to support the Current Use Program as a way to conserve agricultural lands.

**Comment [TN12]:** Waiting for Grand List

**Deleted:** The majority of the productive cropland is located in the Middle Road area, while large woodland tracts and areas in pasture were located in the eastern parts of Swanton Town.

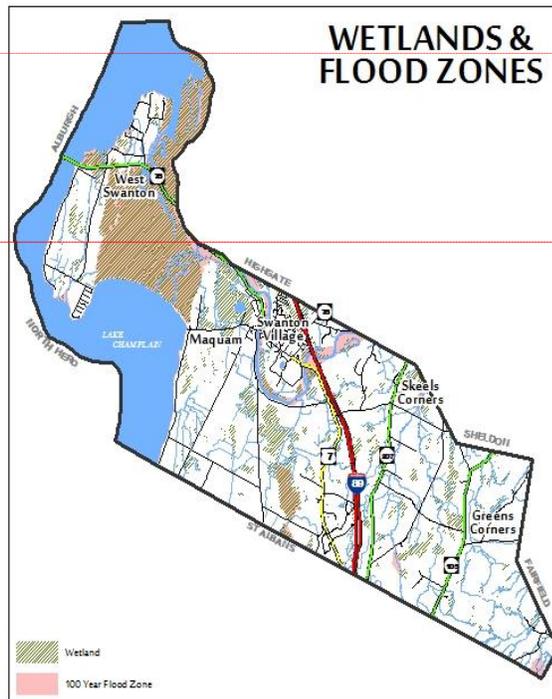
Agriculture plays a major role in Swanton's economy. Consequently, the Town should continue its efforts to preserve and maintain agriculture as a viable economic activity and should also assist in the protection of significant open land resources by collaborating with land management and protection organizations such as the Vermont Land Trust and the Vermont Housing and Conservation Board.

### Wetlands

Map 6.4

Wetlands are areas inundated by ground and surface waters, which support diverse vegetation dependent on wet or saturated conditions. Much of Swanton's soil is hydric and consequently meets the Vermont Wetland Division's criteria for Class II wetlands. In several Swanton locations, the water table is perched and soil conditions are wet year-round. Map 6.4 illustrates an inventory of Class II wetlands in Swanton as identified by the Vermont Significant Wetlands Inventory.

The largest and most significant wetland area (considered by many as the most significant wetland in the northeast) is the Missisquoi National Wildlife Refuge. There are other large wetland areas located near major tributaries such as the Missisquoi River and Jewett and Hungerford Brooks.



**Comment [TN13]:** Revisit Section with Flood Resiliency

**Deleted:** <object>

**Deleted:** Water Quality

**Deleted:** classified

This wetland inventory does not represent all of the wetland areas that are present in Swanton. Citizens are cautioned that any areas suspected of being a wetland should be verified by a wetlands coordinator at the Vermont Division of Water Quality, Wetlands Division.

**Soil Potential for On-Site Septic**

Many of the soils suitable for on-site septic disposal are also considered primary or very good agricultural soils. As depicted on Map 6.5, Septic Suitability, a majority of Swanton Town is not suitable for on-site septic systems.

Much of this land area will only support a mound system. Much of this area is clustered around I-89 and on the east side of Route 7. It should be pointed out that the

highest proportions of soils suitable for conventional septic systems are located within the Village limits where municipal water and sewer services are available.

There is a fair amount of land with soils that are suitable for mound systems on the west side of Sheldon and south side of the Pond Road area. This relatively hilly area of Town is predominantly forested and contains some scattered wetlands.

**Public Water Supplies**

Map 6.5



Map 6.6



Deleted: Readers are

Deleted: It is not surprising that m

Deleted: For m

Deleted: e

Deleted: , the soils

Deleted: 5

Deleted: Map 6.5



The Town of Swanton has three areas that are identified as Source Water Protection areas for public water supplies, as defined by the Agency of Natural Resources. Two of these areas (identified on Map 6.6) protect the public water systems for the Sunset Terrace Estates on Route 7 (serving 12 mobile homes) and Homestead Acres Mobile Home Park on Bushey Road. The third area protects the public water supply at Maquam Shore.

### Earth Resources

There have been a number of quarries over the course of Swanton’s history, including the legendary Swanton Red Marble Quarry. Vermont Mineral Resource Data System (MRDS) has records of these resource areas, which show that the resources extracted include limestone, dolomite, limonite, hematite, and magnetite (MRDS, 1998). The only active operation as of 2015 includes Swanton Limestone located on Jewett Street.

### State and Federally Owned Recreation and Natural Areas

There are a number of state and federally owned properties in Swanton that provide access to Lake Champlain, the Missisquoi River, the Missisquoi National Wildlife Refuge, and the Fairfield Swamp and Management Area (as illustrated on Map 6.1). These areas have been designated for protection of natural resources and critical habitat, in addition to providing recreation opportunities. These areas provide boat access, as well as many other passive and active recreational opportunities. The Refuge provides a wealth of opportunities for hunting, fishing, bird watching, walking, canoeing, and environmental education.

Table 6.10 contains a list of the state and federally owned areas in Swanton. Together with locally owned parks and recreation areas, approximately 5,018 acres in Swanton is publicly owned. This represents 17% of Swanton’s total land area.

Deleted: <object>

Deleted: wo

Deleted: here

Deleted:

Deleted: n

Deleted: ¶  
¶

Deleted: -----Section Break (Continuous)-----

Deleted:

Deleted: <object>All public water systems are required to have a permit to operate. To renew such a permit, a *Source Protection Plan* is required (SPP). The purpose of the SPP is to establish a plan by which the owner of the system will maintain and protect the water supply. The Town should work toward identifying the actual boundaries of the recharge areas and then identify ways to ensure that the water supplies are not adversely affected by existing and future development. The owners of these water supplies are encouraged to involve the Town in the development of Source Protection Plans to ensure that goals and objectives are consistent and compatible.¶  
¶

Comment [TN14]: Confirm with PC.

Deleted: 0

Deleted: ,

Deleted: 9

Comment [TN15]: Waiting for update

**Table 6.10**

List of State and Federally Owned Public Access Areas	
AREA	ACREAGE
<b>State of Vermont Public Lands</b>	
1. Fish and Wildlife Access Areas	
a. Tabor Point	1.25
b. West Swanton	1.03
c. Charcoal Creek	0.5
d. Fairfield Pond	13.0
e. Sandy Point	2.0
f. Former railroad bed (off Maquam to Lakeshore Rd)	23.0
<b>TOTAL</b>	<b>40.8</b>
2. Wildlife Management Areas	
a. Maquam Bay Wildlife Area	391.0
b. Swanton Hatchery	4.0
c. Fairfield Swamp	200.0
Fairfield Swamp	13.0
d. Asetline Marsh (off Maquam)	200.0
e. Swanton Hill	14.3
f. Route 78 Area	83.0
<b>TOTAL</b>	<b>905.3</b>
<b>Federal Public Lands</b>	
1. Missisquoi National Wildlife Refuge	3,148.0
2. Fish & Wildlife Hunting Marsh (south side of I-89)	50.0
3. Fish & Wildlife Hunting Marsh (No. of Rte. 78)	600.0
4. Fish & Wildlife Marsh (So. of Rte. 78)	250.0
<b>TOTAL</b>	<b>4,048.0</b>
<b>TOTAL PUBLIC LANDS</b>	<b>4,994.1</b>

Deleted: 9

Comment [TN16]: Need to Update

**D. LOCAL GOVERNMENT**

**Organization of Government**

Swanton is one of a few Vermont towns that include an incorporated Village. Swanton's Charter was signed on August 17, 1763. The Village of Swanton was established in 1888, more than 100 years after the Town was formed. Swanton Town and Swanton Village maintain two governments, each providing a variety of services to residents.

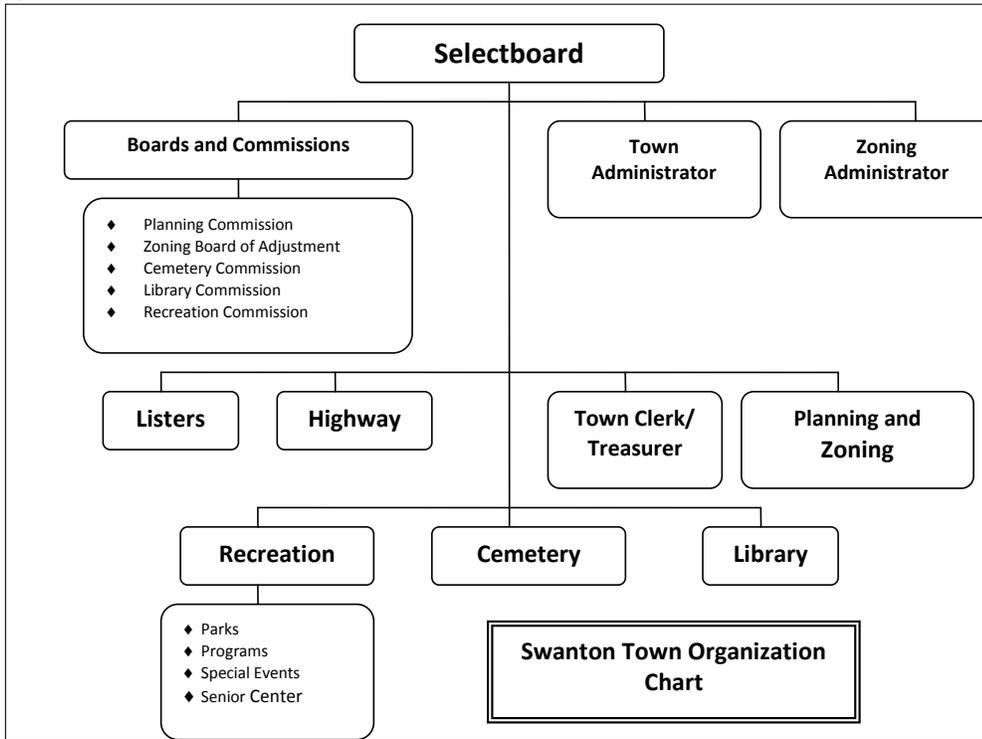
Deleted: in 1888

The cost of providing certain services is shared between the Village and Town residents, such as fire protection and recreation. Services provided to Village residents include: highway, police, fire, and recreation. The Village also provides sewer, water, and electricity and maintains these services by user revenues. Town residents also receive a variety of services, including highways, rural fire protection, recreation, and schools. Missisquoi Valley Rescue provides service to both Town and Village residents and is supported primarily through donations.

Deleted: In some cases, t

Swanton Town is governed by a Selectboard form of government. Figure 6.3 is an organizational chart depicts the various Town officials and the functions they provide.

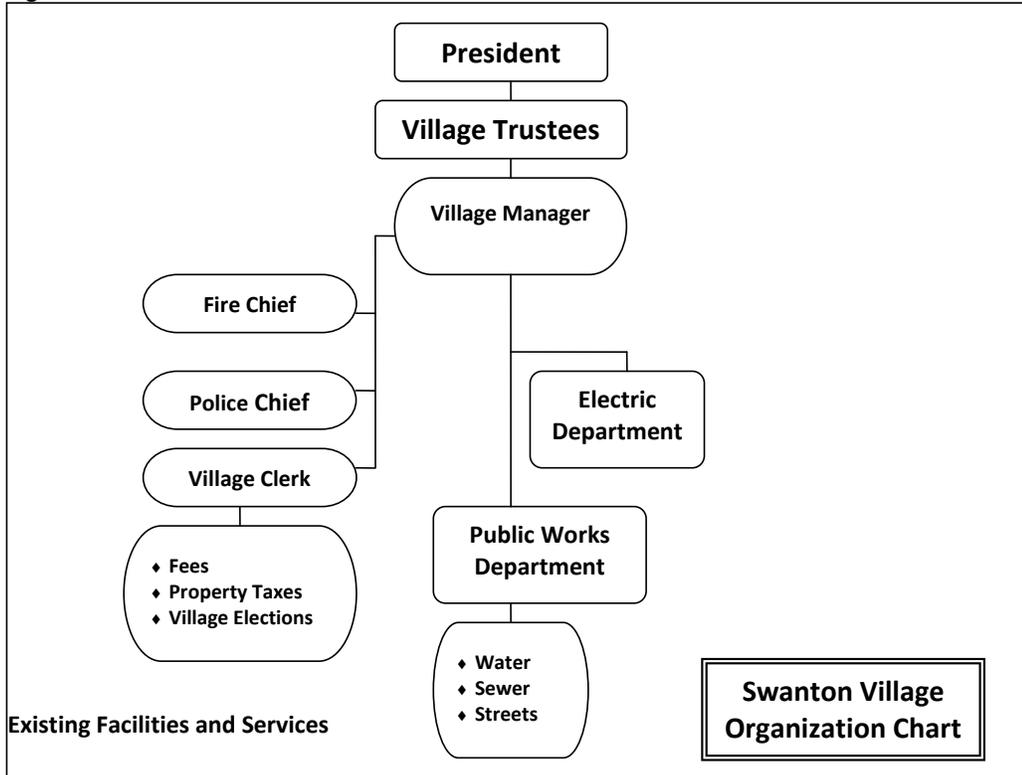
Figure 6.3



Swanton Village is governed by a President who acts as chair of a three member Board of Village Trustees. The Trustees appoint a Village Manager to oversee the Village Sewer, Water, Highway and Electric Departments and other activities. **The Village Manager** appoints a Police and Fire Chief to direct public safety. Elected officials include the Village Clerk/Treasurer and Tax Collector. Figure 6.4 is an illustration of the Village organization and its functions.

Deleted: and

Figure 6.4



The following is a brief discussion of the existing facilities and services provided by the Town and Village. The location of public services and facilities are shown on Map 6.7. As mentioned above, some services are provided by the Village to both Village and Town residents such as electric, sewer, water, fire protection and recreation programs.

**Deleted:** , locations of which

**Deleted:** also

**Deleted:** i



### Police Protection

The Swanton Village Police Department currently serves Swanton Village residents. The Swanton Village Police Department also has a contract to provide patrol services to the Town of Swanton. The Department works closely with the Vermont State Police and the Border Patrol. The police force currently has eleven total staff members (including part-time employees) with 6 full-time officers and one full-time dispatcher. The remaining staff is part-time officers.

Deleted: five

The service demands of the Police Department have steadily increased. The Police Department feels that they are able to adequately meet the demands for service in Swanton at this time.

Deleted: Personnel have increased by two additional employees.

### Fire Protection

Comment [TN17]: Waiting for response.

The Village Fire Department is located within the Village Complex on First Street and is supported by both Town and Village residents. The Fire Department's current inventory includes:

- 3 Engines
- 1 Tanker
- 1 Ladder
- 1 Utility/Decon Trailer
- 1 Boat

The quality and condition of this equipment is well-maintained. The Fire Department's ability to provide adequate services at present and in the future is excellent.

The Department has noted issues in the past associated with fire protection in rural areas beyond the water service area. However, at this time there are water supply ponds, sufficient road access and systems in place that are adequate to service these areas.

### Missisquoi Valley Rescue

Comment [TN18]: Waiting for response.

Missisquoi Valley Rescue (MVR) is located at the Village Municipal Complex on First Street and serves Swanton Town and Village residents as well as the surrounding areas. The service is supported through private donations and tax dollars. The current inventory of MVR's major equipment is:

<u>Equipment Item</u>	<u>Value</u>
• 2006 E-350 Type 3 Ambulance	\$160,000
• 2000 E-450 Type 3 Ambulance	\$145,000
• 2008 Heavy Rescue Van	\$200,000
• Mass Casualty Trailer	\$27,000

- Zoll Cardiac/Monitor/ Defibulator (2) \$8,000 each
- Vital Sign Monitors (2) \$3,000 each

MVR currently has 17 paid employees, 3 are full time and 14 are part time. In addition there is 1 volunteer. Of those 2 are drivers only, 3 are Emergency Care Attendants (ECA), 4 are EMT-B and 6 are EMT-I.

**Deleted:** Employees:1

The quality and ability of MVR to provide service at this time is excellent. There are plans to purchase a new ambulance in 2010 and a fund has been set up with money set aside for it. However, the ability of MVR to continue providing quality services is hindered by the size of the current facility.

### **Municipal Sewer**

**Comment [TN19]:** Waiting for Response

The Village maintains a combined storm and sanitary sewer system that was constructed in 1990. The design capacity of this system is 0.90 Million Gallons per Day (MGD) and the average flow is 0.57 MGD. The system is adequate to meet current needs. The system currently serves most of the area within the Village limits and a few areas of the Town.

**Deleted:** beyond those limits.

### **Municipal Water**

**Comment [TN20]:** Waiting for Response

The Village has maintained a water treatment facility since 1978. The facility located near Maquam Shore was originally designed to supply 1.5 million gallons per day (MGD) with three filters, but only two filters were installed, reducing its capacity to less than 1.0 million gallons per day. The average demand is between 600,000 and 800,000 gallons per day depending on the season.

At present, the water system currently serves portions of the Village and selected areas of the Town, including: Jonergin Drive (Swanton Industrial Park); Middle Road to the limits of the current R-4 zoning district; Grand Avenue to the former Lamoille Valley Railroad; the Abenaki Acres on Bushey Street; and Route 78 to the Missisquoi Valley Union High School (See Map 6.7).

**Deleted:** outside

**Deleted:** the Village

When the system began to reach capacity in 1993, the Village replaced the flat rate system with a metered system by installing water meters for all customers. This reduced demand substantially. More recently, the need for upgrades and additional capacity was acknowledged again. In the fall of 2009, the voters turned down a \$4.5 million bond for improvements to the system. Planning for upgrades and increased capacity continues.

### **Swanton Electric Utility**

**Comment [TN21]:** Waiting for response.

The Swanton Electric Department, a publicly owned utility, has been providing electricity since 1884. The plant is located in Highgate and serves Swanton Town and Village, Highgate and portions of St. Albans. Swanton Electric serves the majority of Swanton residents, but Green

**Deleted:** Central Vermont Public Service

Mountain Power and Vermont Electric Cooperative also provides service to a small portion of Swanton residents. Swanton Electric has the ability to provide service for anticipated growth.

Deleted: Citizens Utility

### **Town Highways**

Comment [TN22]: Waiting for response.

Swanton Town maintains several miles of Town highways. Highway equipment is stored in the Town Garage located on Fourth Street. A second highway garage was built in 2008, which has provided more space for storage of equipment, salt and sand. Eventually all of the equipment and storage will be consolidated into the new garage and shed but currently, both locations are being used. The following is an inventory of Town heavy equipment and its' current condition as of September 2009:

<u>Equipment Item</u>	<u>Condition</u>
• 2001 International Dump Truck & Plow	Good
• 1991 Ford Dump Truck & Plow	Fair
• 2009 Volvo Dump Truck & Plow	Excellent
• 2006 Ford F350 Dump Truck & Plow	Good
• 1997 International Dump Truck & Plow	Good
• 2005 Mack Dump Truck & Plow	Very Good
• 1989 Custom Tri-Axle Trailer	Good
• 1994 White Tractor 4 WD/Mower	Good
• 2001 Caterpillar Trailer-Mounted Motor Generator Set	Excellent
• 1999 Case Backhoe	Good
• 1984 Caterpillar 1206 Grader	Good
• 1989 Verm Wood Chipper	Fair
• 2005 Volvo Excavator	Excellent
• 2006 Husqvarna Lawn Tractor	Excellent
• 2006 Husqvarna Lawn Tractor	Excellent

### **Village Highway Department**

Comment [TN23]: Waiting for response.

The Village Highway Department maintains Village streets and sidewalks. The Department also maintains the equipment to upkeep the streets and sidewalks. Demand for services is expected to continue to be met with the current equipment and personnel. A sand and salt shed was built in 2005. Improvements will continue to be made as the budget allows for them.

#### **Equipment Items:**

- 2007 Pick-up Truck
- 2007 Ton Truck
- 2004 Dump Truck
- 1997 Dump Truck
- 1999 Compressor
- 1997 Sidewalk Plow

- 1997 Vactor Truck
- Several Lawn Mowers

***Parks and Recreation***

**Comment [TN24]:** Add a Recreation Director?

At present, a total of 20.5 acres of parkland is provided by the Town (Table 6.11). In the fall of 2008, 9.5 acres of land adjacent to the John Raleigh Memorial Field Complex was donated to the Town by Shelburne Limestone Corporation and will provide an opportunity for expansion of facilities.

The Swanton Recreation Commission manages a variety of programs, and community events to meet the recreation needs of the community. Youth programs for swimming, softball, baseball, soccer, basketball, skiing, and gymnastics are offered, in addition to an annual summer camp program. Adult programs include basketball and volleyball leagues, and zumba classes. The Recreation Committee also organizes community events, including dodge ball tournaments, golf tournaments, and the Spring Carnival.

Swanton is also host to several trails, which provide walking, running, biking, and horse back riding routes for residents. The Missisquoi Valley Railtrail, a 26.4 mile recreation trail, begins in St. Albans and passes through Swanton on its way to Richford. A second railtrail will soon be open in Swanton. The 96 mile Lamoille Valley Railtrail will begin in Swanton and end in St. Johnsbury. In July of 2009, a scenic 1-mile recreation trail (called the Swanton Fit and Healthy Trail) was opened as a first segment to the Lamoille Valley Railtrail. It links the restored railway depot museum, ballfields, and the elementary school.

**Library**

The Swanton Public Library is located on the corner of First Street and Grand Avenue. The building was donated to the Town in 1993 by the Kings Daughters for use as a public library. The building underwent a major renovation in 1998, including a new addition that doubled the size of the building. A handicap accessible entrance with an elevator was added. There is also a public meeting and function room. The Historical Society shares the building with the Library.

**Town and Village Offices**

**Table 6.11,**

Park and Recreation Areas in Swanton		
Recreation Areas	Acreage	Current Condition
John Raleigh III Memorial Field (recreation ball fields), Jewett Street	14.5	Good
Marble Mill Park (Missisquoi River near bridge and Central School)	3.0	Fair to Good
Swanton Beach, Route 36	2.5	Poor to Fair
Village Green	0.5	Good
<a href="#">Flat Iron Park</a>		
<a href="#">Tacquahunga Park:</a>		
<a href="#">Goose Point Park</a>		
Total Acres	20.5	

Deleted: 0

Deleted: 0

Deleted: .....Section Break (Next Page).....

Swanton maintains two centers of government--the Town Offices and Village Office Complex. The Town Offices are located on Academy Street in Swanton Village. The Village Office Complex is located on Route 78 (First Street) near I-89.

### Town Office

Within the Town Office are the Town Administrator and the Zoning Administrator Offices, the Clerk's Office, the Lister's Office, and Planning and Zoning Offices. The building recently completed renovations that included more storage space, handicap accessibility and a meeting/research room. The Clerk's Office maintains records, issues licenses, collects taxes, and manages local elections. The Planning and Zoning Office manages all building permit and development activity for both Swanton Town and Village. Additionally, the office staffs a five (5) member Development Review Board and a five (5) member Planning Commission. The Town Administrator acted as the Zoning Administrator until 2003, when the Town hired a part-time Zoning Administrator and adjusted the Town Administrator to a full-time position. In general, the Town Office is adequate to provide services to the community at this time.

**Deleted:** Zoning Board of Adjustment

**Deleted:** that implements the Swanton Town and Village Municipal Plan and zoning and subdivision bylaws

**Deleted:** ,

### Village Municipal Complex

Within the Village Complex are the Village Manager and Clerk's Office; fire, police, and rescue departments; electric, sewer, and water departments; and a large meeting space.

The primary functions of the Village Clerk's Office are collection of water, sewer and electric fees and Village property taxes. Special Village elections are also managed out of the Village Clerk's Office. At present, the office is adequate to provide service to the community. The computers are up to date and there are internet capabilities.

**Deleted:** Fax

It is anticipated that service will continue with appropriate updates from time to time. The current facilities and equipment are adequate for anticipated demand for services in the future. There are no immediate plans to replace or expand existing facilities.

### **Fiscal Considerations**

Swanton generates revenues to pay for local services from a variety of sources including local property taxes, intergovernmental transfers in the form of State highway aid, and fees. Capital programming is an important tool to plan for and manage capital expenditures (one-time, non-recurring major costs for equipment, land purchase or construction). Capital programming allows scheduling such expenditures and structuring their financing to avoid a sudden, unanticipated "shock" to the tax rate. Assuming that growth in operating expenditures is spread out, either through timing, financing, or withdrawals from accumulated reserve accounts, the year-to-year fluctuation in expenditures should not be extreme. If, however, expenditure growth should exceed growth in the Grand List and other sources of revenue, the tax rate will rise.

**Comment [TN25]:** Does either municipality have a CIP? Should this section be in Chapter 4?

**E. EDUCATION**

Swanton currently provides high quality education to members of the community. The municipality and its residents take pride in the educational opportunities and give high priority to maintaining a strong academic reputation in the area. The schools strive to provide an education that incorporates advanced technology, learning strategies and subject matter that will meet the needs of all students and will be a strong foundation for future opportunities. Many of the students who receive their initial schooling experience in Swanton go on to succeed in their post-secondary education and in a wide-variety of careers.

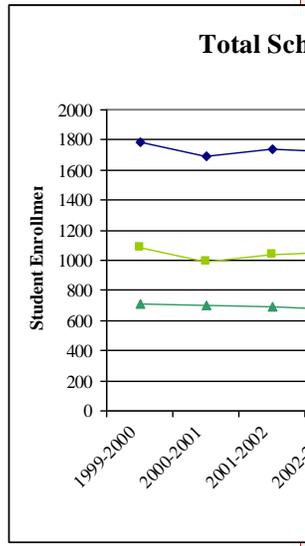
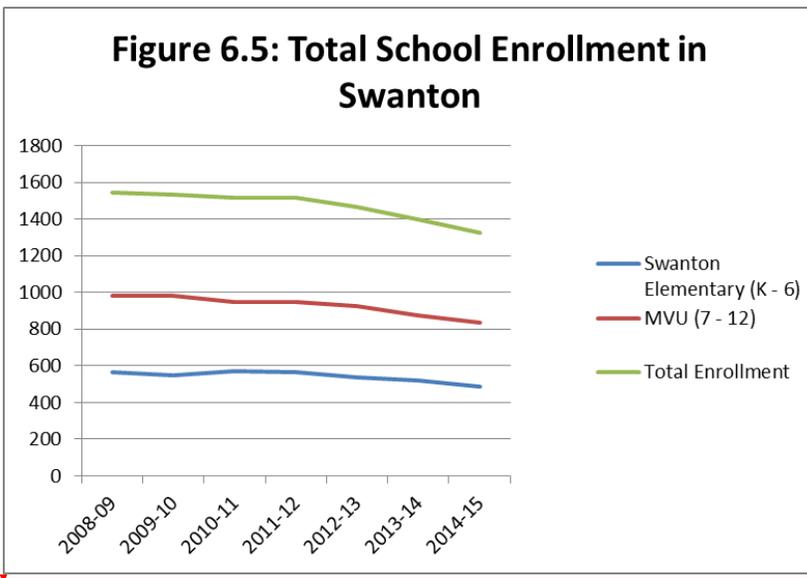
Providing educational opportunities for all ages inspires residents to be life-long learners and to actively pursue their interests. As the municipality experiences development and population growth it is important to continually assess if education is keeping pace with these changes. The public schools in Swanton are part of the Franklin Northwest Supervisory Union.

Swanton Elementary School is comprised of two buildings, Swanton Central building, which houses 2<sup>nd</sup> through 6<sup>th</sup> grades and the Mary S. Babcock building, which houses pre-kindergarten through 2<sup>nd</sup> grade. The Town sends its high school and middle school students to Missisquoi Valley Union High School (MVU), which enrolls students from the towns of Franklin, Highgate, and Swanton, in addition to tuitioned students from other surrounding towns. Swanton's total student enrollment (including the enrollment of MVU) decreased between 2008 and 2015, from 1,545 to 1,323 students. This continues a pattern in decline of enrollment since the 1990s. Enrollment in 1999 was 1,788 students.

Deleted: ¶  
Deleted: ¶

Deleted: 1999  
Deleted: 08  
Deleted: ,788  
Deleted: 594  
Deleted: Figure 6.5 shows that enrollment in MVU has fluctuated during this period due to tuitioning, while grades K-6 has steadily decreased.  
Deleted: Figure 6.5¶

**Figure 6.5: Total School Enrollment in Swanton**



Deleted:

Several opportunities exist for higher and continuing education in the Swanton area and greater region. Community College of Vermont has a campus in St. Albans on South Main Street, offering a variety of courses and support for students. The University of Vermont has an Extension office in St. Albans that also provides a number of resources, support services to the community and opportunities to engage in programs

There are several high education institutions in Burlington, about 40 minutes south of Swanton, including the University of Vermont, Champlain College, St. Michael's College and Burlington College. Johnson State College and Lyndonville State College are also located in Northern Vermont.

**Comment [TN26]:** Any other measures of success? How many students continue to a four year university?

## F. ENERGY

Vermont planning law provides that municipal plans must include an energy program for the community. Such a program is intended to promote the efficient and economic utilization of energy. Practical energy planning and implementation results in positive environmental and economic returns to the community and energy providers. Conservation of energy lessens the demand for expensive new sources, and allows utilities to defer capital investments necessary to provide for additional capacity. This has benefits for residents, businesses, and ratepayers.

While it is recognized that energy supply and demand are directed largely by economic forces at the state, federal, and international levels, the manner in which the Town plans for future growth can have an impact on energy. For example, a highly dispersed and unplanned pattern of land use can waste both land and energy resources. The need for additional infrastructure and fuel consumption can be reduced with proper planning that includes job locations, public services and housing near the growth centers. The siting and design of buildings as well as the selection of appropriate energy systems can influence the efficiency and conservation of energy.

### **Current Use and Renewable Energy**

According to the American Communities Survey (2009-2013), the major heating fuels consumed in Swanton are fuel oil or kerosene (45.6%), natural gas (28.5%), bottled, tank, or LP gas (13.2%), wood (9.4%), other fuels (1.4%), and electricity (1.2%). In Vermont State, the major heating fuels consumed are fuel oil or kerosene (46.5%), wood (16.3%), natural gas (15.9), Bottled, tank, or LP gas (14.9%), electricity (4.6%), and other (1.2%). State energy officials estimate that almost 80 percent of residential energy is dedicated to space heating and domestic hot water.

**Table 6.13: House Heating Fuel in Swanton**

Fuel Type	Housing Units	%
Fuel Oil, Kerosene, etc.	1,175	45.6%
Utility Gas	733	28.5%
Bottle, Tank, or LP Gas	339	13.2%
Wood	241	9.4%
Other Fuel	35	1.4%
Electricity	31	1.2%
No fuel Used	22	0.9%
Solar	-	0.0%
Coal or Coke	-	0.0%
Occupied Housing Units	2,576	100.0%

Source: 2009-2013 American Community Survey

About half of all energy used in Vermont is for transportation, according to the 2005 Vermont Comprehensive Energy and Electric Plan. Over 50% of this is for residential users who drive private cars. Public transportation opportunities in Swanton are limited to bus service, with regional service provided by the Green Mountain Transit Authority.

The use of renewable/alternative energy resources, such as wood, wind, biomass, methane digesters and solar power, can provide cleaner, safer, and potentially more locally available alternatives to traditional fuels and nuclear power. As the state continues to pursue alternative energy resources and local interest increases,

Swanton may find they need to revise their bylaws to accommodate the changes.

Swanton Electric currently derives XXXX% of its power from renewably hydropower sources. There are also several individual homeowners that are have purchase solar panels and are net metering power onto the regional grid.

Deleted: U.S. Census

Deleted: 2000

Deleted: 56.0

Deleted: 4.9

Deleted: 1.5

Deleted: 4.3

Deleted: electricity

Deleted: 2.8

Deleted: other

Deleted: 0.6

Deleted: 58.6

Deleted: bottled, tank, or LP gas

Deleted: 14.4

Deleted: 2.1

Deleted: wood

Deleted: 9.4

Deleted: 7

Deleted: 0.6

Deleted: ¶

Table 6.12


¶

¶

Deleted: and intra and inter-state service through VT Transit.

Comment [TN27]: Update.

Comment [TN28]: Any other renewables in Swanton? Digestors? Solar? Wind? Transportation oriented?

Deleted:



## G. TRANSPORTATION

### Transportation System

The transportation of goods and services in Swanton began on the waters of Lake Champlain and the Missisquoi River. Water travel was the predominant form of transportation until the establishment of railroads in the mid 1800's. By the late 1800's several railroads were established in Swanton carrying passengers and freight to larger urban centers such as Montreal, Burlington and New York and points east such as Morrisville and St. Johnsbury, and west to New York state. Map 6.8 illustrates the existing transportation system in Swanton including railroads, selected trails, and private rights-of-way.

Use of many of the railroads, including the Lamoille Valley Railroad and portions of the Central Vermont Railway, were discontinued after completion of the interstate highway system. Today, the main railroad through Swanton is the New England Central Railway. Though rail travel continues to be an important mode of freight transportation in Swanton, the construction of Interstate 89 dramatically changed the way goods and services were transported. The existing road network is used by truck traffic, tourists, and commuters. Roads in Swanton Village and Town have experienced continually increasing traffic levels. The following provides a brief summary of various transportation facilities and their existing conditions.

### Highways

Swanton is served by several regional routes including: Interstate 89, U.S. Route 7, and Vermont State Routes 36, 78, 207 and 105. The Town and Village maintain a number of Class 1, 2 and 3 highways. According to the Vermont Agency of Transportation 2013 Pavement Assessment, the majority of the state highways in Swanton have ratings of fair or higher. However, Interstate 89 and VT Routes 78 and 105 have segments with poor ratings. It should be noted that the Class 1 Highway portion of VT Route 78 will be paved in 2016.

It should be noted that Swanton has become a local cycling hub. Cyclists have increasingly used Swanton's highways in recent years because of the relatively flat terrain and accessibility to several popular biking locations (the Lake Champlain Island, the Lake Champlain Byway and the Missisquoi Valley and the Lamoille Valley Rail Trails).

### Bridges

The Vermont Agency of Transportation provides sufficiency ratings for all state owned bridge structures 20 feet and greater in length. The sufficiency ratings are categorized by the State into three deficiency status categories: 1) not deficient (ND); 2) functionally deficient (FD); and 3) structurally deficient (SD). Three of the twelve listed structures in Swanton are functionally deficient and two are structurally deficient, The Missisquoi Bay Bridge that connects Alburg to West Swanton was on the State's list of structurally deficient bridges until it was replaced in 2008

Deleted: ¶

Deleted:

Deleted: 2008 Sufficiency Ratings

Deleted: adjusted sufficiency

Deleted: (rating between 60 and 80

Deleted: )

Deleted: routes

Deleted: and 207

Deleted: and bad

Deleted: ; highways with sufficiency ratings in this range are candidates for repair.

Comment [TN29]: Any statistics to add here?

Deleted: ¶

Deleted: '

Deleted: over

Table 6.13 provides a summary of sufficiency ratings of all State owned structures 20' and over in Swanton.

**Table 6.13: Sufficiency Ratings of State Structures 20 ft and over in Swanton - 2014**

Principle Route	Bridge Number	Location	Feature Crossed	Federal Sufficiency Rating	Deficiency Status
I-89	094N	3.1 mi. S. Exit 21	I-89 over TH 3	0956	ND
I-89	094S	3.1 mi. S. Exit 21	I-89 over TH 3	0976	ND
I-89	096N	0.6 mi. S. Exit 21	Missisquoi River	0805	ND
I-89	096S	0.6 mi. S. Exit 21	Missisquoi River	0805	ND
I-89	097N	0.3 mi. S. Exit 21	I-89 over LVRR	0654	FD
I-89	097S	0.3 mi. S. Exit 21	I-89 over LVRR	0775	FD
I-89	098N	I-89 Exit 21	I-89 over VT 78	0730	FD
I-89	098S	I-89 Exit 21	I-89 over VT 78	0406	SD
US7	0178	1.0 mi. S. Jct. VT78E	Missisquoi River	0970	ND
VT78	00002	3.0 mi. E Jct. US2	Missisquoi Bay	0837	ND
VT78	00006	0.2 mi. W Jct. US7	Missisquoi River	0792	ND
C2003	0004	0.5 mi. to Jct. W. CL2 TH4	Hungerford Brook	0572	FD

Source: Vermont Agency of Transportation, 2014.  
 Deficiency Status: ND=Not Deficient, FD=Functionally Deficient, and SD=Structurally Deficient

Deleted: 1

Deleted: ¶  
 ¶  
 ¶  
 ¶  
 Table 6.131  
 Deleted: , 2008

Deleted: 464

Deleted: SD

Deleted: 08

### Rail

The main line of the New England Central Railway (NECR) parallels the Route 7 and 78 corridors through Swanton Town and bypasses the Village. The former train stations in Swanton were located on Depot Street (relocated to South River Street), East Station (on the south end of Robinhood Lane) and in Fonda (formerly Swanton Junction). In recent years, American and Canadian officials have continued to work towards reinstating Amtrak train service between the Vermont and Montreal.

### Air

The Franklin County Airport is located just north of Swanton in Highgate. This general aviation airport currently provides charter passenger service. Residents have access to commercial air travel primarily through Burlington, Plattsburgh, or Montreal.

Deleted: to the south

Deleted: to the north

### Pedestrian Paths

Swanton Village and Town maintain several miles of sidewalks and pedestrian paths. An important goal of Swanton is to plan for alternative modes of transportation that provide safe and efficient access to services. There are several opportunities to encourage non-vehicular modes of transportation, including the Missisquoi Valley Rail Trail, the Lamoille Valley Rail Trail, and Swanton Fit and Healthy Recreation Trail.

Deleted: v

Deleted: i

Comment [TN30]: How many total miles of trail?

Deleted: r

Deleted: t

Deleted: .

## Public Transit

The Green Mountain Transit Authority (GMTA) is responsible for public transit in Franklin and Grand Isle Counties. GMTA operates a shuttle bus service between Alburg and Georgia with several stops in Swanton including at the Swanton Industrial Park on Jonergin Drive, at the elderly housing complex in the old Swanton Central School, at Farrar Street and Grand Avenue, at St. Marie's and First Street, and at Missisquoi Valley Union High School. GMTA also operates a St. Albans City loop, and a shuttle route from Richford to St. Albans. Additionally, they coordinate the Ride Share Program, Medicaid, and elderly transportation services. [Greyhound Lines offers public bus service from Montreal to Burlington, other Vermont locations, and other cities in New England.](#)

**Deleted:** Greyhound Lines offers public bus service from Montreal to Burlington, other Vermont locations, and other cities in New England. Burlington International Airport has national and international connections and Franklin County Airport in Highgate also offers passenger service.

## H. ECONOMIC DEVELOPMENT

### Current Situation

Swanton derives a significant proportion of its revenues from property taxes. Looking inside Swanton's grand list reveals that 75% is derived from year-round residents. Table 6.14 shows a summary of the various grand list components such as residential, vacation, industrial and commercial uses. It is interesting to note that vacation uses (7%) account for a larger proportion than industrial uses (2%) in the total Grand List. Figure 6.6 is a graphic depiction of the 2009 grand list by category.

**Deleted:** 2

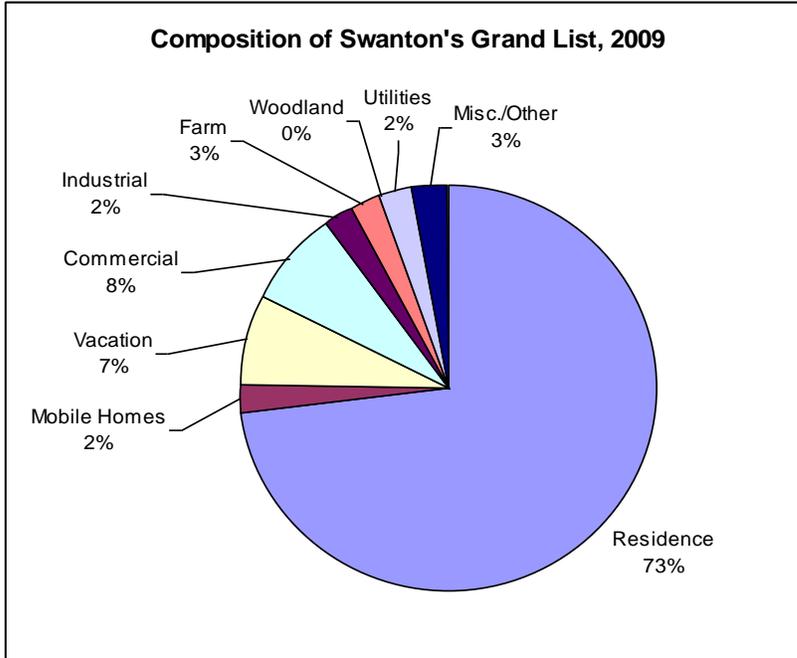
**Table 6.14**

Composition of Swanton's Grand List, 2009		
Revenue Type	No. of Parcels	Total Value
Residence	2,010	\$430,915,000.00
Mobile Homes	250	\$13,456,800.00
Vacation	201	\$42,486,100.00
Commercial	121	\$44,853,300.00
Industrial	13	\$12,994,300.00
Farm	55	\$15,564,500.00
Woodland	0	0
Utilities	6	\$14,505,400.00
Misc./Other	415	\$16,050,700.00
TOTAL	3,071	\$590,826,100.00
Source: Swanton Grand List, 2009		

**Comment [UA31]:** Need the latest version of the Grand List.

**Deleted:** 2

Figure 6.6



In 2013, there were 3,314 Swanton residents age 16 years and over who were employed. Table 6.15 provides a breakdown of the occupations held by residents of Swanton in 2013 (2009-2013 ACS). Thirty-on percent of these residents are in an occupation of management, professional, and related occupations. Another 27% are in sales and office occupations. Seventeen percent of Swanton residents work in service occupations.

Swanton has a variety of businesses. These businesses provide a diversity of employment opportunities for Swanton residents and residents from around the county (Table 6.16).

According to the 2009-2013 American Community Survey, 23% percent of the total workforce works in educational, health, and social services. This is followed closely by those working in manufacturing (19%) and retail (11%).

- Deleted: 0
- Deleted: 0
- Deleted: 2
- Deleted: 02
- Deleted: 3
- Deleted: 00
- Deleted: age 16 years and older
- Deleted: U.S. Census
- Deleted: Twenty-seven
- Deleted: 6
- Deleted: 22%
- Deleted: production, transportation, and material
- Deleted: moving occupation
- Deleted: Twelve percent of the employed have service occupations and 11% have construction, extraction, and maintenance occupations. Only 2% have farming, fishing, and forestry occupations, down from 5% in 1990.
- Deleted: variety
- Deleted: . The types of industries in Swanton are varied
- Deleted: 4
- Deleted: 2000
- Deleted: U.S. Census
- Deleted: fourteen
- Deleted: retail trade and 14% work in
- Deleted: Another 6% hold an occupation in construction. The remainder of the working population is employed in other sectors including agriculture, forestry, fishing and hunting, and mining; arts, entertainment, recreation, accommodation and food services; transportation and warehousing, and utilities; wholesale trade; professional, scientific, management, administrative, and waste management services; finance, insurance, real estate and rental and leasing; and information.

Deleted: Table 6.153

**Table 6.15: Occupation of Swanton Town Residents in 2013,  
Employed Civilian Population 16 Years and Older**

<b>Occupation</b>	<b>Total</b>	<b>Percent</b>
<u>Management, business, science, and arts occupations</u>	<u>1,043</u>	<u>31%</u>
<u>Sales and office occupations</u>	<u>883</u>	<u>27%</u>
<u>Service occupations</u>	<u>572</u>	<u>17%</u>
<u>Production, transportation, and material moving occupations</u>	<u>463</u>	<u>14%</u>
<u>Natural resources, construction, and maintenance occupations</u>	<u>353</u>	<u>11%</u>
<b>Total</b>	<b>3,314</b>	<b>100%</b>
<u>Source: 2009-2013 American Community Survey 5-Year Estimates</u>		

Deleted: ¶

**Table 6.16: Industry of Employed Civilian Population 16 Years and Older in 2013, Swanton, VT**

<b>Economic Sector</b>	<b>Total</b>	<b>Percent</b>
<u>Educational, health, and social services:</u>	<u>773</u>	<u>23%</u>
<u>Manufacturing:</u>	<u>638</u>	<u>19%</u>
<u>Retail:</u>	<u>380</u>	<u>11%</u>
<u>Professional, scientific, management, administrative, and waste management services:</u>	<u>280</u>	<u>8%</u>
<u>Public Administration:</u>	<u>261</u>	<u>8%</u>
<u>Construction:</u>	<u>252</u>	<u>8%</u>
<u>Arts, entertainment, recreation, accommodation, and food services:</u>	<u>243</u>	<u>7%</u>
<u>Transportation:</u>	<u>127</u>	<u>4%</u>
<u>Other services (except public administration):</u>	<u>115</u>	<u>3%</u>
<u>Finance, insurance, real estate, rental, and leasing:</u>	<u>88</u>	<u>3%</u>
<u>Information</u>	<u>81</u>	<u>2%</u>
<u>Wholesale trade:</u>	<u>54</u>	<u>2%</u>
<u>Agriculture, forestry, fishing and hunting, and mining:</u>	<u>22</u>	<u>0.70%</u>
<b>Total</b>	<b>3,314</b>	<b>100%</b>
<u>Source: 2009-2013 American Community Survey 5-Year Estimates</u>		

Deleted: Table 6.16

Deleted: 4

Deleted: Industry of Employed Civilian  
Population 16 Years and Older in 201300,  
Swanton, VT

**I. HISTORIC AND CULTURAL RESOURCES**

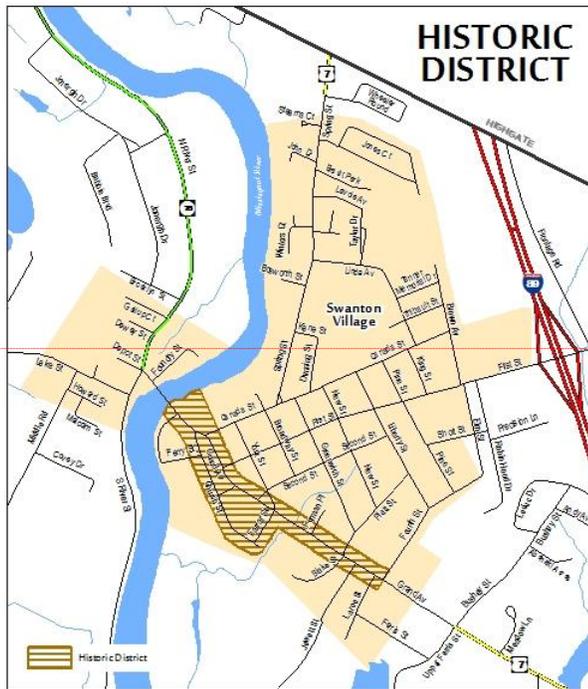
Swanton is rich in cultural and historic resources, reflecting thousands of years of Native American movement and settlement and almost 300 years of postcolonial settlement. Swanton's physical features and natural resources play a dominant role in Swanton's history.

**Pre-colonial History**

There is evidence from pre-historic sites that the Champlain Valley was permanently occupied at least 8,000 years ago. These sites also confirm that people settled along the Missisquoi River. Native peoples have lived in the area for at least 10,000 years. Abenakis continue to live and work in Swanton today. Thus, there is a rich cultural heritage in Swanton that has been conserved.

The Historic Sites and Structures Survey conducted in 1982 by the Vermont Division for Historic Preservation identified approximately 220 sites and structures in the Town and Village, not including an undetermined number of unmarked archeological sites or sacred Native American sites. A listing of these historical sites and structures is contained in Appendix B.

Map 6.9



**Deleted:** ¶ Introduction¶

**Deleted:** The Missisquoi River and Lake Champlain for example, were used to transport goods and services. Consequently, settlement patterns grew out from the Missisquoi River.

**Deleted:** Early business and industry included lumbering, iron mining and manufacturing. The limestone industry, still active today, dates back to 1800. In the Village, marble was extracted. Boats, carriages, and sleighs were manufactured as well as powder and ammunition. To support the growing commercial center several inns and hotels were established. ¶

**Deleted:** <object>

A list of archeological areas in Swanton is on file with the Division for Historic Preservation. A composite map of the sensitive archeological areas has been prepared for the Town by the Division. In order to plan for the protection of these areas, the approximate locations of the sites should be identified and added to the Historic Sites and Structures maps (on file in the Swanton Zoning and Planning Office or the Swanton Public Library).

**Deleted:** At present, a

**Deleted:** is being

**Post-Colonial History**

Early business and industry included lumbering, iron mining and manufacturing. The limestone industry, still active today, dates back to 1800. In the Village, marble was extracted. Boats,

carriages, and sleighs were manufactured as well as powder and ammunition. To support the growing commercial center several inns and hotels were established.

Deleted: ¶

Swanton Village contains a Historic District which includes 89 structures and the Village Green (Map 6.10). Only nine of the 89 structures are listed as non-contributing to the historical context of the District. Again, a series of maps of the historic sites and structures and the Swanton Village Historic District is on file in the Swanton Zoning and Planning Office or the Swanton Public Library.

Swanton's cultural resources include a variety of groups, organizations, books, special collections of documents, and artifacts. These resources include the Swanton Historical Society, the Swanton Public Library, the Swanton Public Schools, the Abenaki Self-Help Association, Inc., Swanton Chamber of Commerce, Town and Village offices, the King's Daughters, Masons, Knights of Columbus, scouting organizations, senior citizen organizations, service clubs, important religious sites, cemeteries and burial grounds, churches, and the Orrin Batchelder photograph collection.

Deleted: s

### Current Issues

As Swanton experiences increased growth, the significant historical and cultural resources become more vulnerable. Consequently, preserving and maintaining the rich inventory of historical and cultural resources has become more challenging. Though Swanton has done a good job at preserving the historic structures, several historic and archeological sites have been threatened or lost to development. It is important to preserve the character of Swanton Village as a traditional New England settlement.

The following are a list of current pertaining to historic and cultural resources:

Deleted: concerns that the Town should consider concerning historic preservation

- The current delineated Village Historic District boundaries omits key sites and structures including the Church Street Cemetery, the old Central School East of the river, the dam on the Missisquoi River and the historic structures west of the river along Depot Street, Scott Street, River Street and Lake Street.
- Heavy truck traffic threatens the integrity of the historic structures within the Historic District in the Village.
- The loss of important historic and cultural resources threatens the traditional customs of the native peoples. The native peoples of Swanton help maintain an understanding of the significance of the historical features in Swanton. It is important to recognize the inherent diversity of conservation perceptions. Understanding our past is integral to understanding our future. By working together, the rich historical and cultural diversity in Swanton can be maintained.

Deleted: <#>The historic covered railroad bridge that burned in June 1987 has been replaced with a historic pedestrian/recreation truss bridge and should be maintained and used for that purpose.¶

Deleted: indigenous

Deleted: indigenous

Comment [TN32]: Is there more specific information to include here?

Deleted: ,

Deleted: , and environmental