

Sheldon, Vermont Town Plan



Adopted on November 8, 2010

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CHAPTER 1

INTRODUCTION

Purpose

The municipal plan guides short-term and long-term community goals. In very basic terms, a Town Plan is a community statement describing the evolution of the Town from the past to the present conditions and into the future. The goals of the Town result from identifying community issues and needs, collecting and analyzing background information, and combining them into a vision statement of how the community should develop. Goals, policies, and objectives are formulated to address specific issues or “elements” such as land use, resource protection, economic development, transportation, housing, education, municipal facilities and services.

The Plan should be an accurate reflection of the needs and wants of Town residents. Tempered by the economic ability of the Town to provide for its residents and the natural resources available, the goals, policies and actions can be determined accordingly.

This Town Plan was developed with the following purpose in mind: to guide Town officials, residents, and persons contemplating actions involving land use, on matters of land development, the economic provision for facilities and services, resource use and conservation, and public health, safety, and welfare. Beyond this purpose, the Sheldon Town Plan serves as the legal basis for land use regulations and capital budget programs which the Town may wish to adopt.

The Plan may also be given effect in State Agency Planning decisions and State and Federal regulatory proceedings, including Act 250 Hearings. The Selectboard and Planning Commission are statutory parties to Act 250 applications involving Sheldon. Determination of a specific project’s conformance, or otherwise, with the Town Plan is one method of participating in the Act 250 process.

The need for involvement of Town residents in the planning process cannot be overstated. While it is the responsibility of the Planning Commission to develop the Plan, citizens and citizen committees can have an active role in gathering information and formulating Plan policies for guiding development. This ensures that the Plan reflects the priorities and desired lifestyle of its residents. A collaborative effort will result in a better plan.

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

Authority

The Town of Sheldon is authorized to prepare and adopt a Municipal Plan via Chapter 117, Title 24 of the VSA (Vermont Municipal and Regional Planning and Development Act). Section 4382 of the Act dictates what needs to be included in a plan. The intent of the law is to encourage a municipality to “engage in a continuing planning process that will further several stated goals.” The Act further states that municipal

plans shall be re-examined, updated, and re-adopted every five years. This process should be ongoing, whereby the Plan is continually reassessed and revised to meet the changing needs of the community. Consequently, there will be future opportunities to review and amend the Plan. Residents, community groups, and anyone with an interest in the Town are encouraged to provide input into this ever-continuing process to the Sheldon Town Planning Commission.

Planning Process

Sheldon first adopted a town plan in November of 1980. The most recent plan was adopted in January of 1994. The Town revised the Plan without substantive alternations in 2000 and 2005. .

Under current law, Title 24, Chapter 117, a municipality must address ten (10) elements in its plan development, which are the following: a statement of objectives, policies, and programs of the municipality to guide the future growth and development of land, public services and facilities, and to protect the environment; a land use plan; a transportation plan; a utility and facility plan; a statement of policies on the preservation of rare and irreplaceable natural areas, scenic and historic features and resources; an educational plan; a recommended program for the implementation of the objectives of the development plan; a statement indicating how the plan relates to development trends and plans for adjacent municipalities, areas and the region developed under this title; an energy plan; and a housing element that shall include a recommended program for addressing low and moderate income person's housing needs. In order to develop regulatory mechanisms (by-laws) appropriate to guide development, a plan must first be adopted by the Town Board of Selectmen. Once adopted, the Plan becomes the basis for development and enactment of zoning and subdivision regulations.

Role of the Sheldon Planning Commission

The Sheldon Planning Commission members are appointed by the Selectboard for three year terms. The Planning Commission is empowered to formulate goals and objectives toward plan development. The Commission is responsible for the review and revision of the Town Plan and to propose amendments to the zoning bylaws and regulations in an effort to implement the plan.

The role of the Commission is ongoing. Changing community conditions, preferences, and priorities call for consistent monitoring of plan objectives. Amendments to the plan may, from time to time, be necessary and the Commission has responsibility for this task.

CHAPTER 2

VISIONS FOR THE FUTURE OF SHELDON

The following visions serve as a guideline for the future of Sheldon:

- ◆ *The preservation of the rural, agricultural character of the town along with the protection of its natural assets should remain foremost in the plan for the future of Sheldon;*
- ◆ *Every effort should be given to the maintenance of diverse agricultural practices which will help preserve the rural landscape of the town and the local economy;*
- ◆ *Growth in Sheldon should occur at a rate that preserves town's dominant rural character and maintains the Town and Region's ability to provide essential services and facilities;*
- ◆ *By encouraging the development of environmentally sensitive, clean businesses, new technology, home-based businesses, and tourism, a more stable tax base can be obtained which would help in reducing dependence on residential property taxes;*
- ◆ *Encourage the development of small-scale businesses that provide employment and basic services for the residents of Sheldon while continuing to support of Rock Tenn and the hydroplant which provide employment to many residents; this will enhance and improve the rural way of life from which we benefit;*
- ◆ *To maintain, improve, and expand recreation areas in the Town of Sheldon in order to provide an assortment of recreational opportunities for current and future generations to come; this will improve the community's health and quality of life;*
- ◆ *Town character should be a factor in the businesses that consider Sheldon towards the town as not only a good location for their business, but also as a place that offers a high quality way of life for their employees;*
- ◆ *Provide local employment opportunities for young people that offer livable wages, which will allow them to live near relatives which can strengthen the family unit;*
- ◆ *A commitment to provide a high-quality of life, to strengthen community, protect natural resources will continue to make our town a special and unique place for to the year-round residents as well as to our tourists and visitor*

CHAPTER 3

SUMMARY OF GOALS AND POLICIES

ARCHAEOLOGICAL, HISTORIC, AND SCENIC RESOURCES

GOAL: TO RECOGNIZE THE ROLE OF SHELDON'S ARCHAEOLOGICAL, HISTORIC, AND SCENIC RESOURCES IN SHAPING THE TOWN'S PRESENT QUALITY OF LIFE AND FUTURE OPPORTUNITIES

Policies

- ◆ Protect sites of potential archaeological, historic and scenic significance
- ◆ Promote growth which maintains the historical land use pattern of— densely settled village centers separated by open agricultural land
- ◆ Promote the use of historic buildings for public purposes whenever feasible

COMMUNITY FACILITIES

GOAL: TO LOOK AHEAD AND PLAN APPROPRIATELY, WITH FORESIGHT TO MEET FUTURE NEEDS FOR PUBLIC FACILITIES BASED UPON COMMUNITY GROWTH AND CHANGE

Policies

- ◆ Promote efficient and functional use of existing municipal buildings and facilities
- ◆ Provide sufficient space and facilities to carry out essential municipal functions
- ◆ Provide a gathering place for community members to address town business
- ◆ Ensure adequate municipal facilities for all age groups

COMMUNITY SERVICES

GOAL: TO PROVIDE MUNICIPAL SERVICES TO MEET THE NEEDS OF LOCAL RESIDENTS OF ALL AGES WITHOUT UNDUE OR SUDDEN IMPACTS UPON LOCAL PROPERTY TAXES

Policies

- ◆ Provide emergency services and law enforcement to protect the health, safety, and property of residents and visitors alike
- ◆ Provide recreational areas and facilities opportunities in convenient and reasonable locations for the use and enjoyment of all residents
- ◆ Conserve Sheldon's recreational resources, discourage incompatible land uses, and protect the scenic qualities which contribute to recreation
- ◆ Consider land needed for community services within the overall land use plan

COMMUNITY UTILITIES

GOAL: To PROVIDE PUBLIC UTILITIES TO SUPPORT CONCENTRATED RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL DEVELOPMENT, AND PROTECT PUBLIC HEALTH AND WATER SUPPLIES IN AREAS WITHOUT MUNICIPAL SERVICES

Policies

- ◆ Use extensions or improvements or new construction of water and sewer systems to remedy existing problems, promote orderly and timely land development and carry out the purpose of the land use plan
- ◆ Ensure that individual on-site septic systems and water supplies are sited and installed in a manner which protects public health and the quantity and quality of ground water according to state statute
- ◆ All telecommunications facilities shall be located in appropriate areas, respecting the integrity of residential areas, aesthetic concerns, and natural issues

ECONOMY

GOAL: To PROMOTE A DIVERSE AND STABLE ECONOMY BY HELPING TO ENSURE THE SUCCESSFUL OPERATION OF EXISTING ECONOMIC ACTIVITIES AND PROVIDING OPPORTUNITIES FOR NEW ONES

Policies

- ◆ Protect and encourage the continuation of agriculture by protecting the rights of farmers who responsibly use Accepted Agricultural Practices
- ◆ Encourage businesses that complement recreation opportunities within the Town.
- ◆ Protect the vitality and importance of the villages as a community and regional asset
- ◆ Encourage commercial development that meets local needs for retail, business, and personal services
- ◆ Encourage businesses and industries which will use the skills of the local labor force

EDUCATION

GOAL: TO PROVIDE ADEQUATE, HIGH QUALITY EDUCATIONAL SERVICES RELATIVE TO ANTICIPATED POPULATION GROWTH

Policies

- ◆ Provide for the education of our school population without overcrowding, inefficient division of basic educational facilities, or reduction in the quality of our educational programs
- ◆ Ensure that rapid growth or development will not inflict undue impacts and hardships upon the ability of the town to provide adequate educational services
- ◆ To broaden access to educational and vocational training opportunities for all ages, sufficient to ensure the full realization of the abilities of current and future residents
- ◆ Ensure regulation of land development in Sheldon does not negatively impact the availability of safe and affordable childcare

ENERGY

GOAL: INCORPORATE ENERGY EFFICIENCY AND CONSERVATION AS A PRIORITY IN LAND USE AND DEVELOPMENT PATTERNS AS WELL AS IN PUBLIC FACILITIES, SERVICES IN THE DELIVERY OF PUBLIC SERVICES AND THE USE OF PUBLIC FACILITIES AND INFRASTRUCTURE

Policies

- ◆ Encourage energy efficiency by making available information regarding groups and organizations in the Provide information to residents and businesses about options to become more energy efficient including opportunities to work with other organizations to achieve this
- ◆ Promote car-pooling among area residents; encourage the use of informal park and ride lots where possible
- ◆ Improve town owned buildings to be as energy efficient as possible
- ◆ Encourage energy conservation by promoting patterns of development that utilize clustering and energy efficient site design whenever possible
- ◆ Encourage the development of local, renewable energy resources

HOUSING

GOAL: To Provide Suitable Land Areas for Residential Development to Serve the Needs of Current and Future Sheldon Residents

Policies

- ◆ Ensure adequate housing options for people of all income levels, ages, household types, and preferences
- ◆ Promote low-density residential housing in areas without municipal services and higher densities in parts of town with existing services or close to existing service boundaries
- ◆ Conserve and protect the vitality and quality of existing neighborhoods

LAND USE

GOAL: To Maintain Sheldon's Rural Character and Scenic and Natural Resources While Providing Sufficient Space in Appropriate Locations for All Land Uses in Light of Their Respective Environmental Needs and Their Mutual Interrelationships

Policies

- ◆ Maintain the character of existing neighborhoods and avoid potential conflicts between incompatible land uses
- ◆ Limit development on slopes greater than 15% and maintain natural vegetation on slopes
- ◆ Discourage development away from areas where soils will not support it due to shallow depth to bedrock, instability, or high water table
- ◆ Protect public health, welfare, and safety by limiting development in the flood plain
- ◆ Protect water quality by limiting development in Wellhead Source Protection Areas, wetlands, and along streambanks
- ◆ Conserve productive lands by accommodating development in areas away from most farming activity and that do not have prime agricultural soils

NATURAL FEATURES

GOAL: To provide for local growth that is compatible with the town's natural features including soils, landscape, water resources, and wildlife

Policies

- ◆ Recognize the importance of the area's natural features to the overall quality of life enjoyed by Sheldon residents
- ◆ Limit development in areas where soils have limited capacity to support structures or filter wastes and in areas where the slope is greater than 15%
- ◆ Guide development away from productive agricultural or forest soils
- ◆ Protect the water quality of the Missisquoi River and its tributary streams by preventing erosion along their banks
- ◆ Protect ground water quality by regulating uses that could introduce contaminants into the ground such as septic systems, excavation activities, or underground storage tanks
- ◆ Limit the loss of local wildlife habitat
- ◆ Limit infringement upon wetlands
- ◆ Identify and protect areas where rare, threatened or endangered species exist

TRANSPORTATION

GOAL: To ensure reasonable, functional, and orderly efficient development of transportation systems

Policies

- ◆ Protect the health, safety, and welfare of the traveling public
- ◆ Promote safe, convenient, economic, and energy efficient transportation systems including public transit options and paths for pedestrians and bicycles
- ◆ Promote transportation activities that respect the natural environment
- ◆ Maintain the scenic character of the town's rural byways
- ◆ Support public transit efforts of the Northwest Vermont Public Transit Network to increase mobility and access of town residents
- ◆ Support the efforts of the Northwest Vermont Rail Trail Council to promote, enhance, and increase use of the Missisquoi Valley Rail Trail

CHAPTER 4

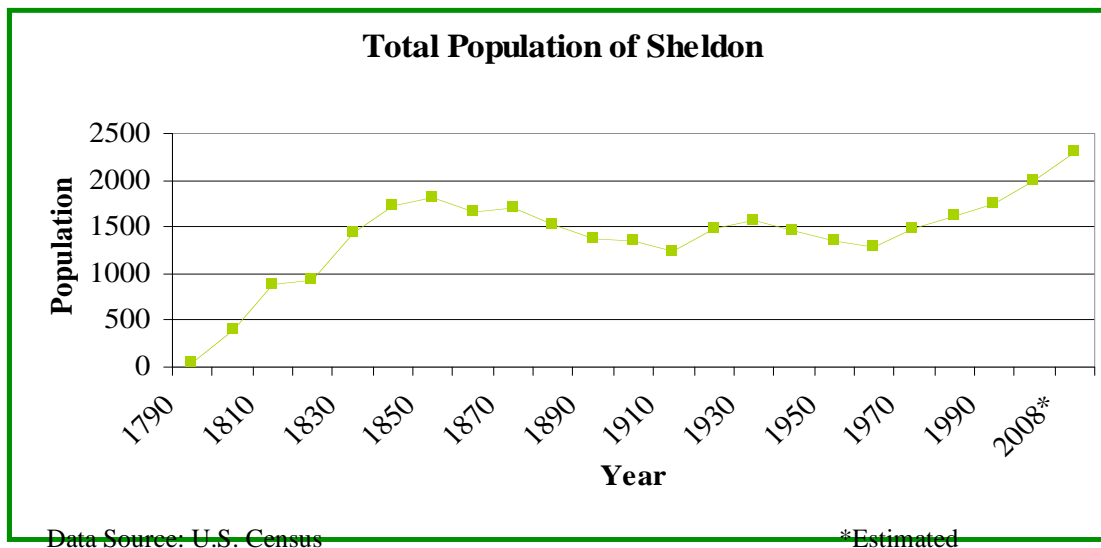
COMMUNITY PROFILE

The Town of Sheldon is located in the northeast of Franklin County which is in the Northwest corner of Vermont. It is bordered on the north by the towns of Franklin and Highgate, on the east by Enosburg, on the southwest by Swanton, and on the south by Fairfield. Sheldon covers 25,177.54 acres or approximately 39.34 square miles. This amounts to 5.68 percent of the total area of Franklin County. The total area in the County is 693 square miles of which 56 square miles is water.

Population

Planning relates to people, therefore an understanding of the population and its geographical distribution as it changes over time is essential. Population growth is the result of two factors: natural increase (where the number of births exceeds the number of deaths) and/or net in-migration (where the number of people moving into a community exceeds the number of people moving out). Through 1970 to 1990, more people moved out of Sheldon than moved in, while from 1990 to 2000 Sheldon finally saw a positive net migration figure of 59 people (Figure 2). The Town of Sheldon has seen a steady growth in its population since 1960, mainly through natural increase. Figure 1 shows how the population of Sheldon has fluctuated over the years.

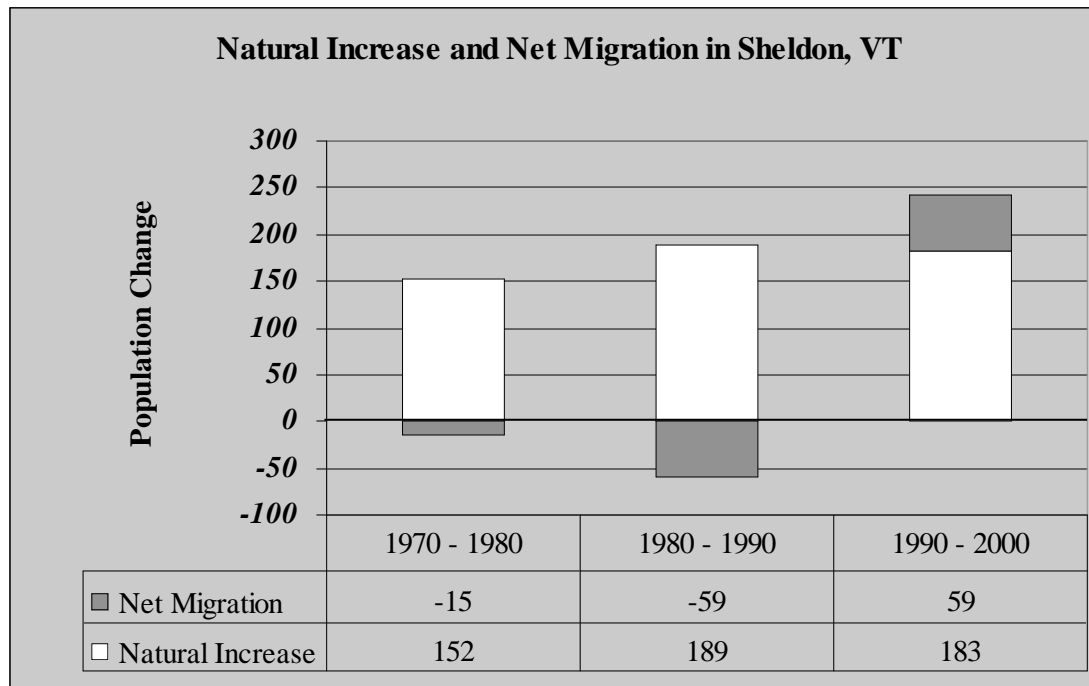
Figure 1



As illustrated above, the Town population reached a peak in the mid-1800's and has only recently rebounded to that level. As of the 2000 Census, 1,990 persons reside within Sheldon's borders. This amounts to 4.38 percent of the countywide population. Table 1 shows the population for Sheldon and its bordering

communities. It should be noted that the 2008 figures are estimates from the *U.S. Census*. Table 2 shows the percent change for Sheldon, Franklin County, and the State of Vermont.

Figure 2



Source: US Census 2000

Year	1980	1990	2000	2008Estimated
Franklin County	34,788	39,980	45,417	47,949
Franklin Town	1,006	1,068	1,268	1,300
Highgate	2,493	3,020	3,397	3,691
Enosburg	2,070	2,535	2,788	2,698
Swanton	5,141	5,636	6,203	6,428
Fairfield	1,493	1,680	1,800	1,916
Sheldon	1,618	1,748	1,990	2,303

Source: US Census of Population

	% Change 1980-1990	% Change 1990-2000	% Change 2000-2008
Franklin County	14.92	13.60	5.58
Sheldon	8.03	13.84	2.52

Projected Populations

The small size of the population makes long-term forecasting difficult, especially at the local level. Most models assume that in-migration, driven in part by

continued economic growth and development, will continue well into the years to come, but natural increases will level off somewhat, given the overall aging of the population. According to the Vermont Department of Aging and Disabilities, the projected population of Sheldon is expected to increase slightly through the year 2015. Table 3 shows the projected populations for Sheldon and for Franklin County through the year 2020. Table 4 shows the percent changes in projected population for both Sheldon and Franklin County. The percent increases for the Town are expected to be slightly higher than those of the County.

Year	2000 (actual)	2008 (estimated)	2010 (proj)	2015 (proj)	2020 (proj)
Franklin County	45,417	47,949	49,583	51,701	54,065
Sheldon	1,990	2,303	2,227	2,361	2,494

Source: MISER Population Projections for VT, VT Dept. of Aging and Disabilities

	% Change 2000-2008	% Change 2008-2010	% Change 2010-2015	% Change 2015-2020
Franklin County	5.58	3.41	4.27	4.57
Sheldon	2.52	-3.30	6.02	5.63

Age Distribution/Growth by Group

The median age in 2000 for the residents of Sheldon was 34.3 years. This figure is lower than both Franklin County and the State of Vermont. Sheldon, Franklin County, and the State of Vermont have all seen an increase in their median ages since 1980. Like many towns in the State, the population of Sheldon is aging.

According to the 2000 US Census, Sheldon has a smaller percentage of its population in the sixty-five and up age group than the County and the State. The Town has seen a decrease in the percent of the population that is under-eighteen since 1980 and in its elderly population since 1980. Like the County and the State, the percentage of persons in the eighteen to sixty-four age group has increased over the years. Table 5 shows the percentages of population for the different age groups and also the median ages for Sheldon, Franklin County, and Vermont.

	% of Pop < 18 yrs			% of Pop 18-64 yrs			% of Pop 65+ yrs			Median Age (yrs)		
	1980	1990	2000	1980	1990	2000	1980	1990	2000	1980	1990	2000
Sheldon	37.0	31.9	31.0	54.0	60.7	61.4	9.0	7.4	7.6	26.3	29.5	34.3
Franklin County	33.0	29.0	28.1	56.0	60.0	60.9	11.0	11.0	11.0	28.9	31.7	35.7
State of Vermont	28.4	25.9	24.2	60.2	62.3	63.0	11.4	11.8	12.7	29.4	33.0	37.7

Source: US Census of Population 1970-2000

Special Populations

The US Census provides information about the number of people with various levels and types of disabilities. Sheldon had a higher percentage of persons between

the ages of sixteen and sixty-four with a work disability than Franklin County or the State of Vermont. The Town also had a slightly higher percentage of people with a sensory physical, mental, self-care, or going outside the home disability in both age groups. Table 6 lists the percentage of persons with some type of disability.

	Civilian Non-institutionalized Persons 16-64 years			Civilian Non-institutionalized Persons 65 years and over	
	% with at least one disability	% having at least one work disability	% having sensory, physical, mental, self-care, or going outside the home disability*	% with at least one disability	% having sensory, physical, mental, self-care, or going outside the home disabilities*
Sheldon	19.5	14.07	20.64	46.1	90.78
Franklin County	18.3	12.30	20.57	43.2	86.00
Vermont	15.7	9.68	17.35	38.6	75.00

Source: US Census, 2000
 *People with more than one of these disabilities are counted twice.

Household Size and Type

The way the population groups itself into households affects the demand for housing, community services, and employment. Nationwide and within Vermont, household size declined dramatically during the 1970's, and has continued to decline more slowly since. This trend is partly due to families having fewer children. However, the decrease in the number of individuals living together is also due to the breakup of extended family households, an increasing number of single-parent households, and the larger number of elderly who are choosing to remain in their own homes.

The percentage of family households has decreased by 2.0 percent between 1990 and 2000. Married couple families have also seen a decrease. The only household type that has seen an increase is non-family households. Non-family household is defined as either a householder living alone or with another non-related person. This category went from seventeen percent of total households to nineteen percent of total households. Table 7 shows the percentages of households in Sheldon in 1990 and 2000.

Household Type	% of Total Households in 1990	% of Total Households in 2000
Family Households	83.0	81.0
Married Couple Families	71.0	65.9
Male Householder - no wife	3.0	5.1
Female Householder - no husband	9.0	10.0
Non-family Households	17.0	19.1
One-person (householder living alone)	11.0	13.0

Source: US Census of Population and Housing 1990-2000

Sheldon's average household size decreased from 3.42 persons per household in 1980 to 2.94 persons in 2000. The 2000 average is higher than that for Franklin County as a whole at 2.67 persons per household. A decrease in average household size corresponds to an increase in the number of households. The number of households in Franklin County and in Sheldon is increasing much more rapidly than the population is, and this generates a demand for more housing units. However this need is not being met (Table 8).

	Population	Households	Housing Units
Sheldon	13.84	18.52	10.21
Franklin County	13.60	17.02	11.25
Vermont	8.18	14.23	8.54

Source: US Census of Population 1990-2000

Education Level

In the Town of Sheldon, 81.3 percent of its residents were high school graduates in 2000, which increased from 74.6 in 1990. This figure is almost exactly the same as the percentage of people in Franklin County who hold the same degree. The percentage of college graduates in Sheldon was 12.7 percent in 2000, which increased by 5.5 percent since 1990. In Franklin County, the 2000 figure was 15.3 percent. The State of Vermont, as a whole, had 86.0 percent of its residents holding high school diplomas while 27.0 percent held bachelor degrees. Table 9 shows the percentage of persons with a high school diploma and the percentage of persons with a bachelor's degree or higher.

	% with a High School Diploma or Higher	% with a Bachelor's Degree or Higher
Sheldon	81.3	12.7
Franklin County	81.9	15.3
Vermont	86.0	27.0

Source: US Census of Population 2000

Income

Median household income for the Town of Sheldon was slightly lower than Franklin County and for the State of Vermont in 1989. This changed in 1999, when Sheldon's median household income raised above the County and the State. Median household income is based on residency. It is the middle figure of all incomes reported to the US Census for each area. It includes wages earned, along with other types of income such as social security income, public assistance income, and retirement income. During the 1990's, Sheldon's median household incomes grew by more than the County and the State's median households incomes. To the contrary, Sheldon had a higher percentage of families below the poverty level in 1999 as compared to Franklin County and the State of Vermont. It should be noted that these figures are from the 1990 and 2000 US Census and it is possible for these to have positively changed during the past five years. Table 10 shows the median household incomes for Sheldon, Franklin County, and for Vermont.

	Median Household Income 1989	Median Household Income 1999	Percent Change 1989-1999	Percent of Families Below Poverty Level 1999
Sheldon	\$27,180	42,179	55.2	8.2
Franklin County	\$28,401	41,659	46.7	7.0
Vermont	\$29,792	40,856	37.1	6.3

Source: US Census of Population 1990-2000

Employment

According to the Vermont Department of Employment and Training, the 1,180 workers who held a job in Sheldon in 2008 enjoyed the highest average annual wage in Franklin County (\$44,736). This wage compares favorably with the County's (\$36,119) and State's (\$38,317) average annual wage. These figures include only jobs which are covered by unemployment insurance – therefore, specifically excluding those who are proprietors and/or self-employed, including most of the Town's farmers. It is important to note that average annual wage is for jobs that are actually located in the Town itself, rather than the average incomes of Sheldon residents. The pulp and paper mill, which employs approximately 150 people in Sheldon Springs, provides the vast majority of these local jobs.

As of the 2000 US Census, a relatively high percentage of Sheldon residents over the age of sixteen were in the labor force – 74 percent as compared to 70 percent countywide. The majority of workers in Sheldon were employed in production occupations (16.3 percent) followed by management, business, and financial occupations at 14.1 percent and office and administrative support occupations at 13.5 percent. Table 11 shows the employment breakdown by occupation for Sheldon, Franklin County, and the State of Vermont.

	Sheldon		Franklin County		Vermont	
	Count	% of total	Count	% of total	Count	% of total
Production	163	16.3	3,085	13.4	28,756	9.1
Management, business, and financial	141	14.1	2,897	12.6	42,491	13.4
Office and administrative support	135	13.5	3,555	15.4	45,062	14.2
Professional and related	124	12.4	4,167	18.1	72,645	22.9
Sales and related	85	8.5	2,003	8.7	32,546	10.3
Transportation and material moving	64	6.4	1,440	6.2	15,528	4.9
Construction and extraction	62	6.2	1,381	6.0	17,998	5.7
Food preparations and serving related	45	4.5	772	3.3	15,693	4.9
Installation, maintenance, and repair	39	3.9	1,091	4.7	11,564	3.6
Building and grounds cleaning and maintenance	38	3.8	593	2.6	10,673	3.4
Farming, fishing, and forestry	34	3.4	518	2.2	4,160	1.3
Personal care and service	32	3.2	769	3.3	10,176	3.2
Healthcare support	22	2.2	410	1.8	5,855	1.8
Protective service	18	1.8	384	1.7	3,987	1.3
Total employed population	1,002	100.0	23,065	100.0	317,134	100.0

Source: US Census of Population 2000

Work Trips

According to the 2000 US Census, 23.3 percent of work trips were made within the borders of Sheldon. The biggest percentage of work trips from Sheldon were made to St. Albans City. Table 12 lists the journey to work destinations from Sheldon, Vermont.

Commuting Time to Work

Most of Sheldon's residents traveled between twenty and twenty-nine minutes to work. In Franklin County, the majority of workers traveled between thirty and forty four minutes to work. The mean travel time to work for Sheldon residents was 26.5 minutes while Franklin County, as a whole, averaged 25.6 minutes for travel time to work.

Destination	# of Trips	% of Trips
Franklin County	754	76.9%
Sheldon	229	23.3%
St. Albans City	227	23.1%
St. Albans Town	104	10.6%
Swanton	69	7.0%
Enosburg	64	6.5%
Franklin	14	1.4%
Fairfield	14	1.4%
Richford	12	1.2%
Georgia	6	0.6%
Fairfax	6	0.6%
Highgate	5	0.5%
Fletcher	3	0.3%
Montgomery	1	0.1%
Grand Isle County	2	0.2%
Chittenden County	203	20.7%
Rest of Vermont	10	1.0%
Other	12	1.2%
Total	981	100%

Source: U.S. Census 2000

Minutes to Work	Sheldon	% of Workers	Franklin County	% of Workers
less than 10 minutes	152 (persons)	17.0%	4,604 (persons)	21.6%
10-14 minutes	65	7.3%	2,691	12.6%
15-19 minutes	173	19.3%	2,304	10.8%
20-29 minutes	211	23.6%	3,122	14.6%
30-44 minutes	136	15.2%	4,925	23.1%
greater than 45 minutes	158	17.7%	3,678	17.2%
Mean Travel Time to Work	26.5 minutes		25.6 minutes	

Source: US Census of Population 2000

Grand List Trends

It is possible to get an idea of how the amount and type of housing and other land uses in the community are changing over time by using information from the Sheldon Grand List. The Town of Sheldon has seen an increase in the number of parcels from 812 to 885 from 1999-2010 which is an overall 8.99% increase. Table 14 shows the number of parcels categorized by their land use in Sheldon in 1999, 2005, and 2010 along with percent changes.

	1999	2005	2010	% Change	
				1999-2005	2005-2010
Residential <6 acres	349	379	395	8.60	4.22
Residential >6 acres	159	156	169	-1.89	8.33
Mobile Home w/out Land	37	33	26	-10.81	-21.12
Mobile Home with Land	58	76	92	31.03	21.05
Vacation	25	24	23	-4.00	-4.17
Commercial	25	29	32	16.00	10.34
Industrial	1	1	2	0.00	100.00
Utilities	6	6	9	0.00	50.00
Farm	59	58	57	-1.69	-1.72
Woods	1	3	2	200.00	-33.33
Miscellaneous	92	81	77	-11.96	-4.93
Total Parcels	812	846	885	4.19	4.60

CHAPTER 5

ARCHAEOLOGICAL, HISTORIC, & SCENIC RESOURCES

GOAL: TO RECOGNIZE THE ROLE OF SHELDON'S ARCHAEOLOGICAL, HISTORIC, AND SCENIC RESOURCES IN SHAPING THE TOWN'S PRESENT QUALITY OF LIFE AND FUTURE OPPORTUNITIES

Policies

- ◆ Protect sites of potential archaeological, historic and scenic significance
- ◆ Promote growth which maintains the historical land use pattern of densely settled village centers separated by open agricultural land
- ◆ Promote the use of historic buildings for public purposes whenever feasible

According to recent archaeological investigations, the northwest corner of Vermont has been home to humans for at least 12,000 years. The first people, called Paleo-Indians, lived and camped around the Champlain Sea and major river valleys, including the Missisquoi. This culture evolved over eight to nine thousand years to become what we know as the Algonquins. The tribes of St. Francis and Abenaki are of this Native American culture, and most certainly inhabited the land near Lake Champlain along the Missisquoi River and Black Creek. These two water bodies flow through Sheldon and early history records an Indian presence here.

Archaeological investigations have uncovered thirty-six prehistoric sites in Sheldon. Many of these were found during digs conducted in connection with the installation of the hydro project during the 1980's. Because of the wealth of sites along the Missisquoi River, archaeologists assume that all of the river's tributary streams and brooks are likely to contain sites of prehistoric activity. These sites could be protected by using measures, which would limit the potential for stream bank erosion.

In more recent times, the colonial governor of New Hampshire, Benning Wentworth, granted 23,040 acres to Samuel Hungerford and sixty-four associates. In the spring of 1790, the first settlers, George Sheldon and a family named McNamary along with their house servants, came by means of oxen and sled from Connecticut. They settled on the north bank of the Missisquoi, opposite the mouth of Tyler's Branch. In 1791 the settlers petitioned to change the name of the town from Hungerford to Sheldon.

The Town's population peaked in the 1830's at 2,158 persons. During this time Sheldon Village alone contained three churches, a post office, three stores, two hotels, two grocery stores, a grist mill, a sawmill, a carriage shop, a cabinet maker's shop, harness shop, two blacksmith's shops, and the Missisquoi Bank. The Town was comprised of eleven school districts. Apparently, the population boom had its effect upon the environment as one historian reports, "The Missisquoi River and Black Creek had become severely polluted. One observer described them as being 'scarcely translucent'."

By this time agriculture's emphasis had shifted from sheep to dairy. Although Fairfield produced more butter, Sheldon led the State of Vermont in the production of cheese during the late 1860's.

On October 19, 1864, during the Civil War, a score of "Rebel Raiders" led by Captain Young entered St. Albans, robbed the banks, and killed several inhabitants. Young's men then made for Canada, going by way of Fairfield Pond towards Sheldon. The Raiders set fire to the Black Creek Bridge in order to halt Captain Conger's party, which was in close pursuit. Fortunately, the Methodist minister squelched the blaze before any damage was done. The Raiders attempted to rob Missisquoi Bank, but it was closed. They stole horses and food and hurried on their way to Enosburg. The Vermont Historical Society placed a marker commemorating this event at the east end of the Black Creek Bridge in 1964. There is also a marker from the Historical Society at the site of the Phinneas Raid.

Sheldon became a mill town in 1894 when Joseph Shipley began producing ground wood pulp at the Missisquoi Mill. The ownership of the mill has changed several times throughout the years. The current operator, Rock Tenn, employs approximately 150 people and produces 91,000 tons of recycled paperboard annually.

Sheldon suffered many thousands of dollars in property damage during the flood of 1927. The beautiful suspension bridge at Sheldon Springs and the North Sheldon Bridge were among the major losses.

A Town Clerk's Office and Library were constructed in 1951. In 1958 the town garage was built with the addition of a three-stall fire station in 1979. The new school was completed in 1975. Improvements were made to the water system in Sheldon, and to both the water and sewer systems in Sheldon Springs in 1976. In 2009 a new fire station was constructed in Sheldon Springs. Further improvements will be made to the water system in 2011.

In 1990, a Bicentennial Committee was formed in anticipation of celebrating both state and local bicentennials in 1991. The committee met monthly for a year to plan activities. The culmination of this planning was a July 4th parade at Sheldon Village followed by outdoor festivities in the meadow adjacent to the cemetery. The Town had not had a parade since 1941, and the streets were lined with people from Grace Church to the cemetery. Following the parade, games, music, food, and fellowship contributed to a memorable day for citizens and visitors.

Historic Resources

At the 1995 Town Meeting citizens expressed interest in holding another parade and celebration in 1996. In addition, it was felt that something should be done to recognize the oldest home in the village, which was built for Col. Elisha Sheldon.

As a result, the Sheldon Historical Society was founded in January of 1996. The society consists of twenty to thirty members who meet four to five times a year. The Society's objective is the preservation of historical artifacts, records, and stories in town. The current yearly dues are three dollars. Anyone interested in joining or if they would like to be placed on the mailing list can contact the Historical Society or the Town Clerk for information.

Several meetings were held in conjunction with the founding of the society and planning future activities. Members of the society decided to plan a celebration

recognizing Col. Sheldon's former home on July 6. The celebration was named Old Home Day.

A historical marker honoring Col. Sheldon was purchased and erected in his memory. Accordingly, a group of modern day re-enactors of Col. Sheldon's famous Revolutionary War Calvary Unit came from Connecticut to participate along with two of their well-trained horses.

Following the parade, the marker was dedicated by the commander of the unit. The unit then marched to the Colonel's grave in the old part of the cemetery with flowers in his honor. A tactical demonstration of Revolutionary era charges was enjoyed by all.

Following the display, participants and spectators enjoyed drinks, a chicken barbeque, ice cream (homemade and Ben and Jerry's). Children were entertained by various games and contests. Various ongoing exhibits and a concert by Vermont's own 40th Army National Guard Band contributed to the success of the event.

The Historical Society has continued to hold several meetings each year. Interesting programs have been presented, including Sheldon's Post Office, the Poor Farm, Sheldon Fair, and the Mineral Springs.

A number of local structures are listed in the State Historic Register. The State also recognizes the Sheldon Creek Historic District, and the Sheldon Springs Main Street Historic District. Many of the Town's historic structures have been razed or rehabilitated to the point where they have lost the details which tie them to the past. These losses may be attributed to a lack of awareness, interest, and/or motivation among property owners. In addition, economics places the need for basic shelter over the importance of historically appropriate restoration.

Historic buildings, which were once in public ownership, such as schoolhouses, have been sold off in the hope that they would add more benefit to the grand list than they will absorb in town services. A number of these buildings are sitting idle and in disrepair. Sheldon's historic buildings, its rural land use pattern, and its typical Vermont scenery contribute to a quality of life that many residents take for granted. These features are a direct link to local history; a link that provides not only interesting and pleasing sights, but also valuable insights into the Town's present and future. Once gone, they cannot be replaced or returned.

Not included in the Register is the Region's historic settlement pattern of small villages and hamlets, located along well-traveled routes, surrounded by an open, working landscape. This pattern strongly evokes the Region's 19th century agrarian heritage, and contributes much to its particular sense of place and community.

Smaller landscape features such as stone walls, old barns, outbuildings, corner stones, markers, trees, and old apple orchards and lilac bushes planted around former homesteads, all have historic value and importance; however these unfortunately often go unnoticed. Despite the fact that these features say as much about the Region's rural and agricultural heritage as many of its more readily recognized historic landmarks, they are often disturbed, removed, or demolished without any thought. Recognizing the need for more public education, the Vermont Department of Forests, Parks, and Recreation published in 1994 *Stonewalls and Cellarholes: a Guide for Landowners on Historic Features and Landscapes in Vermont's Forests*.

Cultural and historic resources are also at risk of degradation through improper earth resource extraction. This includes the accidental destruction of buried archaeological sites and diminished scenic qualities that may limit the future use of

disturbed sites. Noise, dust, and increased traffic on roads near extraction sites all compromise the rural character and sense of place the Town enjoys

Scenic Resources

The Northwest Region of Vermont is an extremely rich visual assortment of diverse landscapes, to the heavily wooded Western slopes of the Green Mountains. Visual language of an area plays an important role in how a community is perceived.

Scenic highways and corridors link natural, cultural, and scenic resources to the historic landscape of the area. The visual character of Sheldon makes it an excellent place to live. Sheldon, like all other towns, should preserve its scenic vistas. The Town should also encourage innovation in design and layout of development so that the visual impact can be minimized. The use of vegetative buffers and other screening methods should be encouraged to help reduce the visual impact of development in the Town.

Recommendations

- ◆ Consider the historic settlement pattern of the community when zoning land for development
- ◆ Encourage cluster development in order to consolidate building sites in a manner which reduces their impact on open agricultural fields and forested areas

CHAPTER 6

COMMUNITY FACILITIES

GOAL: TO PLAN APPROPRIATELY, WITH FORESIGHT TO MEET FUTURE NEEDS FOR PUBLIC FACILITIES BASED UPON COMMUNITY GROWTH AND CHANGE

Policies

- ◆ Promote efficient and functional use of existing municipal buildings and facilities
- ◆ Provide sufficient space and facilities to carry out essential municipal functions
- ◆ Provide a gathering place for community members to address town business
- ◆ Ensure adequate municipal facilities for all age groups

Public Buildings

The Town of Sheldon owns several buildings as shown in Table 15. All of these buildings are in need of some, if minor, repair.

Table 15: Public Buildings in the Town of Sheldon, VT

PUBLIC BUILDINGS, TOWN OF SHELDON, 2005					
Building	Location	Land Area	Owner	Use	Condition/ Comments
Elementary School	TH 29	7.4 acres	School District	K-8 Education Rec. Field	Built in 1973 - at capacity
Town Garage	TH 2	1 acre	Town	Storage/Maintenance of Equipment	Built in 1973 - needs new roof
Town Clerks Office	TH 4	0.4 acre	Town	Town Office Library	Built in 1960 – cramped
Fire House	TH 2	0.125 acre	Town	Garage Meetings Training	New building completed 2009
Salt Building	TH 2	1 acre	Town	Storage	1981
Sewerhouse	TH 43	2.5 acres	Town	Sewer Plant	1976
Sheldon Water House	TH 4	6.5 acres	Town	Pumphouse	Agricultural easements

The Town Clerks office, which also serves as the library and public meeting room, has very limited space. The library has a collection of almost 5,000 books, and serves several hundred patrons a year. This service is offered in very cramped quarters and the Town Clerk's vault is at capacity.

In 2005 the town voted to allocate funding toward the construction of a new Fire Station. This project has been completed and the Fire Station in Sheldon Springs now has adequate space and up-to-date facilities.

Public Land

The Town owns a number of small parcels of land which it has picked up over the years through tax default. All of these are too small for development according to the Town zoning bylaw.

A parcel of 96 acres was acquired by the Town for a municipal forest. Some residential lots have been sold from the original parcel. The remaining 86 acres have never been surveyed, and are not actively managed for wood production, recreation, or wildlife habitat. A list of town owned lands are shown in Table 16.

Table 16: Public Land in the Town of Sheldon, VT

Name	Location	Size	Use
Cardosi Lot	Sheldon Springs	.25 acre	Vacant
Dump Land	Bridge Street	.25 acre	Vacant
Fay Parent Lot	TH 4	1 acre	Well
Grist Mill Lot and Waite Lot	TH 2	.18 acre	Grist Mill Park
Lawson Clapper Lot	TH 2	.66 acre	Vacant
Municipal Forest	RTE 105	86 acres	None
Pump House	School Street		Pump House
Rec. Field	Sheldon Springs	4 acres	Recreation field at school
Rooney Lot	TH 2	.25 acre	Vacant
Sewer Plant	Mill Street	.25 acre	Sewer Plant
Sheldon Water House Lot	Main Street	5 acres	Water House
Town Garage	Bridge Street	.75 acre	
Town Hall Lot	TH 4	.75 acre	Vacant
Town Office Lot	Main Street	.38 acre	Town Office
Water House	Boarding House St.	.25 acre	Water House

Recommendations

- ◆ Consider feasibility and cost estimates for a new municipal building that would house the Town Clerk's office off of Poor Farm Road.
- ◆ Plan and budget for renovation of existing municipal office building and to bring into compliance with ADA standards.
- ◆ Have municipal forest surveyed, and request assistance of county forester to evaluate the property and suggest a management plan to provide for better use of the land for timber production, wildlife habitat, recreation.
- ◆ Update Capital Budget and Program. State law requires that in order to charge impact fees, towns must update their Capital Budget and Program every year.

CHAPTER 7

COMMUNITY SERVICES

GOAL: To Provide Municipal Services to Meet the Needs of Local Residents without Undue or Sudden Impacts on Local Property Taxes

Policies

- ◆ Provide emergency services and law enforcement to protect the health, safety, and property of residents and visitors alike
- ◆ Provide recreational opportunities in convenient and reasonable locations for the use and enjoyment of all residents
- ◆ Conserve Sheldon's recreational resources, discourage incompatible land uses, and protect the scenic qualities which contribute to recreation
- ◆ Consider land needed for community services within the overall land use plan

Law Enforcement

The Vermont State Police and Franklin County Sheriff provides police services for Sheldon. The State Police currently have twenty-six uniformed officers based out of the St. Albans Barracks when all positions are filled. Dispatching is based out of the Williston Barracks, while four troopers work out of outposts in eastern Franklin County. The two outposts help to facilitate communication and to shorten the response time with the surrounding communities. The Franklin County Sheriff's Department covers Franklin County and contracts with individual towns who request additional police services. Department had a total of 16 full-time deputies and 23 part-time deputy officers 35 officers and 8 other staff members. The Sheriff's department has 13 fully-equipped Ford Crown Victoria patrol units, 4 four-wheel-drive vehicles, 3 unmarked vehicles, 2 Arctic Cat snowmobiles and 2 all-terrain-vehicles Crime statistics for the region can be obtained from the Department of Public Safety – Criminal Justice Services..

Most of the complaints received locally are motor vehicle-related and involve noise and nuisances. A more recent and escalating problem are complaints about off-road vehicles, including snowmobiles.

Ambulance

The First Response crew is made up of 8 members. The Town reports that First Response answers nearly 200 calls a year on average. Sheldon has a contract with the town of Enosburg, which provides for advanced rescue and ambulance services.

Fire Department

The Sheldon Volunteer Fire Department is currently composed of twenty-two members and two stations. The department currently has 3 pumper and tanker trucks.

The Town of Sheldon is now dispatched through the 911 system. The fire department responds to over 100 calls a year. Approximately one quarter of these calls is fires and about three-quarters are car accidents.

The fire department is funded through donations, fund-raisers, and an annual appropriation from town property taxes. There is a capital budget for equipment replacement which is financed through impact fees assessed on new development. However, these fees alone are not adequate to replace large, expensive items.

Water from the Missisquoi is piped to nine hydrants in Sheldon Springs. There are currently four dry hydrants in the Town. Housing developments in the outlying areas must provide their own water for use in case of fire. Access to water, adequate roadways and turn-arounds for fire-fighting vehicles should be reviewed during the permit process for all new development.

Recreation

Ball fields, tennis courts and a playground are available at the elementary school. The gym is also available for local use. The Little League ball field for local youths is owned by Rami Bourdeau. The fields are in high demand and are used frequently by the community.

The Missisquoi Valley Rail Trail traverses through many towns in Franklin County, including the Town of Sheldon. The 26.4-mile trail, located on the former Central Vermont Railroad bed, links the communities of St. Albans City, St. Albans Town, Swanton, Fairfield, Sheldon, Enosburgh, Enosburg Falls, Berkshire, and Richford. The year-round trail accommodates snowmobiles, bicycles, horses, joggers, hikers, walkers, and cross-country skiers. Parking and primary access to the trail for Sheldon residents is between Route 105 and Old Sheldon Road, and at the trails end in Richford. A representative of the Town serves on a regional committee organized to develop the management plan for the trail.

Library

Sheldon has had a local public library since 1869 when the Sheldon Agricultural Library Association was founded. By 1895, the library was located in the home of Miss Trudeau.

Today, the Sheldon Public Library is housed at the Town Office building. It is open fourteen hours a week with evening hours available. There are approximately 5,100 volumes, with approximately one hundred new titles added each year. There are also twenty-four periodical subscriptions and twelve children's' programs. Additionally, audiotapes are available for patrons to check out. There is also a computer with internet access. Impact fees collected from new development in the Town are earmarked for additions to the library collection. Library trustees estimate that 330 people use the library each year.

The library sponsors special events including a summer story hour, Christmas coloring contest, a Christmas bazaar, Town Meeting luncheon, and a bake sale at the annual school meeting. Net proceeds from the holiday craft fair benefit the library's building fund.

Library trustees are currently undergoing reorganization, and will soon begin work on a five-year plan for their facilities and program. The biggest issue facing the library over the next five years is that of space. The current location is very cramped

with no room for a worktable or an area for children to sit and read. A building advisory committee has been formed to deal with the lack of space issue. The committee includes select board members, library trustees, townspeople, and a construction consultant.

The library currently meets the State standards for library facilities and services. Libraries that meet the State standards are eligible for grants and free cataloging services from the Department of Libraries. This allows the library to greatly improve its service to its patrons.

Cemeteries

The Town of Sheldon has several cemeteries which are now closed, and three which remain open. Their status is shown in table 17. It is important to plan ahead in order to reserve space adjacent to the existing cemeteries for future expansion. It is also important to ensure that adequate funding arrangements are made for the long-term maintenance of cemeteries, especially once they are filled.

Table 17: Cemeteries in Sheldon, VT

	Who maintains the cemetery?	Size in Acres	Remaining Capacity
Rice Hill Cemetery	Church	2.50	open
Sheldon Village Cemetery	Association	5.50	1/3
Missisquoi Cemetery	Association	1.25	Closed
Grace Episcopal Cemetery	Town	1.00	Closed
North Sheldon	Town	.25	Closed
West End Cemetery	Town	1.50	Closed
East Sheldon Cemetery	Town	.50	Closed
Poor Farm Cemetery	No one	.75	Closed
St. Anthony's	Church	3.00	Open

Solid Waste Disposal

Sheldon is a member of the Northwest Vermont Solid Waste Management District. The district includes twelve Franklin and Grand Isle County towns. The District has a contract for disposal at the Highgate Transfer Station for all member municipalities. In February of 2000, the District purchased four recycling trailers and a truck. Long range plans include a three-cell lined landfill with associated transfer stations and a district-wide recycling program. Meanwhile, Sheldon has a contract with Waste U.S.A. in Coventry to take their trash until a local facility is completed. There is currently no local drop-off site for recyclables.

At their 1993 Town Meeting, Sheldon residents voted to support the solid waste district in further testing of a landfill site located in the Town. The site is in an undeveloped area west of Sheldon Springs which is zoned for agricultural use. There are no Sheldon residences within a mile. Under the proposed contract with the solid waste district, the district would monitor the landfill site for twenty years and then the Town will have the option to purchase the site for one dollar.

Recommendations

- ◆ Require access to water for fire fighting and roadway access and turnaround for emergency vehicles when reviewing development permit applications.
- ◆ Continue financial support for local First Response Squad.
- ◆ Consider options for creating additional space for the library.
- ◆ Consider further recreational opportunities and re-forming a recreation committee.
- ◆ Investigate options for recreational use of municipal forest.
- ◆ Consider establishing sinking fund for replacement of fire fighting equipment.

CHAPTER 8

COMMUNITY UTILITIES

GOAL: To Provide Public Utilities to Support Concentrated Residential, Commercial, and Industrial Development, and Protect Public Health and Water Supplies in Areas without Municipal Services

Policies

- ◆ Use extensions or improvements of water and sewer systems to remedy existing problems, promote orderly and timely land development.
- ◆ Ensure that individual on-site septic systems and water supplies are sited and installed in a manner which protects public health and the quantity and quality of ground water
- ◆ All telecommunications facilities shall be located in appropriate areas, respecting the integrity of residential areas, aesthetic concerns, and natural issues

Water Systems

Sheldon has two public water systems that serve the Town. They are referred to as the Sheldon Water System and the Sheldon Springs Water System. In 2010 bids for major improvements to the water systems in Town were being receiving and construction is anticipated to begin in 2011 soon after this Plan's revision.

Currently, the Sheldon Water System draws from a shallow, gravel well just outside the Village. This well, developed in 1975, has a capacity of seventy gallons per minute. Its maximum daily demand is 44,000 gallons. Its source protection area is subject to an agricultural easement which allows the owner use of the land excluding activities which might contaminate the ground water.

A cement reservoir on lower Main Street holds 20,000 gallons of water, only about half a day's reserve supply for the system. Water is distributed through 4" PVC pipes and 2" galvanized lines pressurized by a pump. There are no fire hydrants on the system. Pressure is adequate except for two connections which were added at the top of Crow Hill. The water is chlorinated. This system is adequate to service development at the current level, but would require an upgrade to serve a large development.

The Sheldon Water System has nearly 200 hook-ups. The system is financed by hook-up fees and quarterly user fees. The Sheldon Springs water system operates from a 180 foot drilled well located off School Street. The well, drilled in 1979, has a forty gallons-per-minute capacity and a maximum daily demand of 35,000 gallons. Its source protection area is not protected from uses which might cause contamination. According to a study conducted in 1990, potential sources of contamination include an industrial dump site and a gas station. The well has been tested for low levels of phenols and high levels of sodium. Engineering tests for a new well site off Poor Farm Road have been completed, but access to the site remains unresolved. The water is currently treated with chlorine in the distribution lines.

A reservoir with 40,000 gallon capacity is located upgrade from the well. Consequently, water does not always travel into the reservoir before distribution through the system. Distribution lines are 8" cast iron and 2-4" PVC.

On-site wells and springs serve the remainder of homes in town. At least some of the local groundwater has shown signs of nitrate contamination. Water sources near Sheldon Springs have high sulfur content.

Wastewater Treatment

The Village of Sheldon Springs has a municipal sewage treatment plant with an extended air system constructed in 1976. In 2003, the Town upgraded the system with a new digester and sludge pump and refurbished the aviation tank. All homes and businesses in the village are connected to the system. The system is designed to handle 54,000 gallons of effluent per day, and is currently receiving approximately 30,000 gallons per day. There is no written policy governing extensions to the system. Hook-up and user fees are charged. There is no long-term plan or budget for system upgrades or maintenance.

Storm water infiltrates the system at times of high rainfall. However, the current operator does not consider this a significant problem.

A 13,000 gallon drying bed located next to the wastewater treatment plans is used by the Town as well. This bed is adequate to treat the volume of wastewater generated by the Town in the near future.

The remainder of the Town is served by on-site septic systems. As of 2007 new construction, updating or repairing a wastewater systems must be approved and permitted by the state.

Telecommunications

Telecommunications have become increasingly important to the security and economic success of residents and businesses in the northwest region of Vermont, as well as in all other sections of the State. Telecommunication towers and related infrastructure require careful consideration. These structures tend to be located in highly visible locations such as on mountaintops and ridgelines. The need for additional facilities is projected to increase dramatically in the coming years. The Federal Telecommunications Act of 1996 placed certain limitations over municipal control of these structures; however within those confines, Sheldon must act to protect the Town's historic character, rural nature, and aesthetic beauty. Both Cellular One and Bell Atlantic have cellular tower sites at Jay Peak and in St. Albans.

Recommendations

- ◆ Develop written policy regarding extensions to water and sewer systems, encourage Selectboard to use policy contained in this plan when considering line extensions.
- ◆ Develop written policy for allocating remaining capacity of Sheldon Spring's sewage disposal plant between residential, commercial, and industrial uses.
- ◆ Attempt to get a long-term agreement for sludge disposal, or start setting aside money to purchase a site.
- ◆ Determine extent of problems with remaining non-conforming septic systems and research alternatives for replacing them.

CHAPTER 9

ECONOMY

GOAL: To PROMOTE A DIVERSE AND STABLE ECONOMY BY HELPING TO ENSURE THE SUCCESSFUL OPERATION OF EXISTING ECONOMIC ACTIVITIES AND PROVIDING OPPORTUNITIES FOR NEW ONES

Policies

- ◆ Protect and encourage the continuation of agriculture by protecting the rights of farmers who responsibly use Accepted Agricultural Practices
- ◆ Encourage businesses that complement recreation opportunities within the Town
- ◆ Protect the vitality and importance of the villages as a community and regional asset
- ◆ Encourage commercial development that meets local needs for retail, business, and personal services
- ◆ Encourage businesses and industries which will use the skills of the local labor force

Overview

Sheldon has been primarily an agricultural community since first settled in the late 1700's, The rural character contributes to the high quality of life in Sheldon, however economic development opportunities exist that will maintain or enhance the character of the Town. As agriculture remains prominent in the local economy, opportunities for farmers to sell their products locally should be explored. There is a strong market for many value-added products in the state and the region. The Town can encourage Residents to consider these opportunities to supplement their current farming activities or to generate greater income in their household. Additionally, economic development will provide more local jobs. If commercial and industrial opportunities are explored and carefully planned in accordance with current land use and economic activities, the overall quality of life can be improved in Sheldon.

Agriculture

According to historical records, Sheldon led the State in cheese production during the 1860's. Today, the dairy industry continues to play a major role in the local economy. There are approximately 44 operating dairy farms in Sheldon. Farmers in Sheldon report that they are making a good living. The trend is for smaller farms to be bought by other larger operations.

Forty-seven farmers were surveyed by planning commission members in the early 1990's. The average age of this sample was just under fifty-two. They reported owning an average of 150 acres each. There are several hundred acres of land owned by non-farmers in town, which is leased for pasture or crops. Only eight of the forty-seven farmers surveyed felt that they had no family member to take over the farm when they retired. Eleven farmers reported that they have had some difficulty with conflicting land uses in their neighborhoods, including increasing traffic or complaints of noise and/or farm odors. These problems are occurring mostly in more populated areas along the Enosburgh border, in Sheldon Village, and along Route 105.

The vast majority of farmers interviewed felt it is important to conserve agricultural land and many have considered selling the development rights to their property. During a public survey conducted by the planning commission, sixty-nine percent of respondents said that agricultural land should be protected. The Vermont Land Trust has stepped forward as a leader in the purchase of development rights to protect farmland from development. Other opportunities exist however, to guard productive farmland from development such as incentives to cluster housing.

Seventeen of the farmers surveyed reported some diversification of their operations. Maple sugaring was the most common activity with nine reporting commercial maple operations. Six farmers said that they log on their property, four keep beef cattle, and one has bees. About one-third of local farms have some form of off-farm income.

Sheldon also has an active non-dairy agricultural sector. One local landowner operates a sheep farm. In addition, Sheldon now has the largest dairy replacement heifer operation in the state. Terry and Joanne Magnan and family now raise over 1,100 heifers on a contract basis for several area farmers.

Food & Lodging

The latter part of the 1860's marked a lucrative local business era. Four principal enterprises bottled the waters of local mineral springs. These waters were claimed to be a "remedy for cancer, scrofula, and other diseases of the blood. During 1868 alone, 14,792 boxes of 24 one-quart bottles were dispatched to all parts of the country.

As a result of the successful promotion of mineral springs water, Sheldon acquired considerable importance as a summer resort. Stages departed from St. Albans every morning at 8:00 a.m. and returned in time to connect with the afternoon trains. Approximately eleven hotels were in operation in town during this period. Portland House, now the Napoli Home for the Aged, is the only one still in existence.

Although there are only two restaurants and one catering business, this sector of the economy still contributes substantially to the local economy, providing jobs, tax revenues, and dining services for Sheldon residents.

Other Commercial Enterprises

According to the 1999-2000 edition of the Vermont Yearbook, Sheldon has many different types of businesses and services for its residents and visitors. These include tourist orientated services, outdoor recreational services, retail stores, lodges, construction services, automotive services, financial advising services, and restaurants. These businesses all contribute to the local economy by providing jobs, tax revenues, lodging, dining, and other services for Sheldon's residents.

The top employers in the Town of Sheldon include Rock-Tenn, Bourdeau Brothers Inc., Abbey Restaurant and the Sheldon Public School system.

Industry

Joseph Shipley came to Sheldon in 1894 and began the Missisquoi Mill which produced ground wood pulp. The mill flourished and expanded into a pulp and paper mill in the early twentieth century, and Sheldon became a mill town. The ownership of the mill has changed several times throughout the years. The current operator, Rock Tenn, employs approximately 150 people and produces 91,000 tons of recycled paperboard annually or approximately 260 tons a day at its mill location in Sheldon Springs.

During the ownership of Boise Cascade in the early 1980's, the water power rights were separated from the mill and Missisquoi Associates, a private company, constructed a hydroelectric plant with a much greater capacity for producing electric power. The power generated here is sold to Velco.

Recommendations

- ◆ Require that developers place language in covenants which acknowledges agricultural practices as an established land use in rural residential areas.
- ◆ Promote local, small scale business by supporting improvements to communication infrastructure and access as well as zoning for home-based businesses in residential areas.
- ◆ Encourage economic development in village centers to provide local services to residents and that are accessible and enjoyable to visit.
- ◆ Upgrade and maintain village utilities and services to allow for economic development.
- ◆ Consider changes in zoning districts to accommodate industry where there is possibility of extending municipal services.

CHAPTER 10

EDUCATION

GOAL: To PROVIDE ADEQUATE, HIGH QUALITY EDUCATIONAL SERVICES AND PLAN FOR ANTICIPATED POPULATION GROWTH

Policies

- ◆ Provide for the education of our school population without overcrowding, inefficient division of basic educational facilities, or reduction in the quality of our educational programs
- ◆ Ensure that rapid growth or development will not inflict undue impacts on the ability of the town to provide adequate educational services
- ◆ To broaden access to educational and vocational training opportunities for all ages, sufficient to ensure the full realization of the abilities of current and future residents
- ◆ Ensure that is adequate, safe and affordable child care

Samuel Sheldon built the first school house on the west side of Black Creek in Sheldon Village in the early 1800's. At its population peak in 1880, the Town had thirteen schools. These facilities employed twenty-one teachers and educated 385 pupils at a cost of \$2,512.86 in 1880 dollars.

Today, Sheldon has one school located in Sheldon Springs which serves students from pre-school through eighth grade. The Sheldon School, built in 1975, has a design capacity of 350 students. The 2009-2010 budget was \$5,330,329. Currently, there are no plans to expand the elementary school. The total enrollment in June of 2010 was 254 students, not including the pre-school with the breakdown by grade as follows:

Grade	K	1	2	3	4	5	6	7	8	Other	Total
Enrollment	25	30	29	26	17	35	30	30	29	3	254

The Town does not have its own high school and therefore, they have a choice of attending options for their high school aged students. They can either attend Bellows Free Academy (BFA) in St. Albans or Fairfax, Enosburg High School in Enosburg, or Missisquoi Valley Union (MVU) High School in Swanton. As of 2010, there are a total of 114 high school students from Sheldon that attend area high schools. BFA in St. Albans enrolled 70 students, Enosburg Falls High School enrolled 35 students, MVU High School enrolled 8 students and South Burlington High School enrolled 1 student from Sheldon for the 2009-2010 school year. Vocational education is supplied at all three of these sites. The tuition rates for the high school students in 2009-2010 were the following: MVU High School - \$9,548 per student, Enosburg Falls High School - \$11,609 per student, BFA – St. Albans - \$10,027 per student and South Burlington High School - \$12,816 per student.

There are several opportunities for higher education, continuing education and adult learners in the region. While there are no adult education opportunities offered in Sheldon, adult basic education courses are offered in Enosburg Falls and St. Albans.

Community College of Vermont offers college-level courses in St. Albans. The University of Vermont, St. Michael's College, and Champlain College are all located in the Burlington area as well.

Since 1990, the Town has been charging impact fees on new development to cover the cost to "acquire, construct, expand, and equip" educational facilities. The fees are assessed when building permits are issued. These fees may only be used to cover costs which are directly related to the residential growth which generated them.

The cost of maintaining a school is shared between the Town, the State, and the Federal Government. The local share of school cost is currently raised through property taxes and comprises the largest fraction of municipal tax bills.

Childcare

Childcare can be a growing concern for existing and prospective families, whether it means finding quality services or securing the costs of services. High quality, available childcare is a critical component supporting a stable workforce.

According to state data, Sheldon currently has 9 registered childcare homes and two licensed childcare centers, The 2000 U.S. Census indicates that there are 617 children from birth to age 12 living in Sheldon, this is significantly more than the total capacity of available childcare in town. Some families may seek childcare in other towns near their place of employment or with family members. Data on other options, such as siblings, stay at home parents, family care providers, un-registered childcare homes or other opportunities are not available. Therefore it is unknown how the needs of the other children are being met.

Recommendations

- ◆ Maintain capital budget and program and reevaluate yearly to provide long-term planning for school facilities and equipment.
- ◆ Consider improvements to school parking and road alignment to ensure the safety of students and drivers.

CHAPTER 11

ENERGY

GOAL: INCORPORATE ENERGY EFFICIENCY AND CONSERVATION AS A PRIORITY IN LAND USE AND DEVELOPMENT PATTERNS AS WELL AS IN PUBLIC FACILITIES, SERVICES AND INFRASTRUCTURE

Policies

- ◆ Provide information to residents and businesses about options to become more energy efficient including opportunities to work with other organizations to achieve this
- ◆ Promote car-pooling among area residents; encourage the use of informal park and ride lots where possible
- ◆ Improve town owned buildings to be as energy efficient as possible
- ◆ Encourage energy conservation by promoting patterns of development that utilize clustering and energy efficient site design whenever possible
- ◆ Encourage the development of local, renewable energy resources

Energy production is essential to human society and, at the same time, threatens the environment that sustains us. Most energy sources have negative environmental impacts and the challenge for the future will be to reduce energy consumption in general, and to shift demand from the more harmful energy sources toward those that are renewable and have an overall low environmental impact. Energy conservation is an important step in developing a comprehensive energy plan for the future of Sheldon.

Land use and energy are closely related. Land resources are used in the production, transport, and disposal of energy products. Land use patterns exert a strong influence on major end uses of energy, including transportation, heating and cooling of buildings, and the energy used in developing infrastructure. Furthermore, land is used for the disposal of waste products resulting from our energy consumption.

Local Energy

Energy expenditures comprise a part of the Town's budget. The expenditures inventoried below on Table 18, even though not a comprehensive list, accounted for approximately three percent of the Town's total budget over the five-year period examined. The increases shown in the right hand column could be due to a variety of factors including inflation, increases in the cost of energy, changes in operating procedures, or changes in equipment.

TABLE 18: MUNICIPAL ENERGY EXPENDITURES TOWN OF SHELDON			
	2004	2009	% change 2004-2009
ROAD DEPT.			
Fuel & Oil	\$16,000	\$16,960.94	6%
TOWN OFFICE			
Electricity	\$963	\$1,079.53	12%
Heating Oil	\$1,114	\$1,078.06	-3%
STREET LIGHTS	\$7,500	\$8,941.50	19%
SEWER DEPT. - Electricity	\$6,467	\$10,553.19,	63%
WATER DEPT. - Electricity	\$11,256	\$12,947.71	15%
TOTAL	\$43,300	\$51,560.93	20%
Source: Sheldon Town Reports			

Most departments experienced increases in energy expenditures over the past 5 years; the proportion of the Town's total budget spent on energy was increased by about 20%.

According to the 2000 U.S. Census, fuel oil and kerosene are the most popular home heating fuels in Sheldon (408 occupied housing units out of 670, or 60.90 percent). Wood is the second most popular home heating fuel with 120 units (17.91 percent). The third most popular home heating fuel is bottled, tank, or LP gas with 82 units (12.24 percent). Utility gas follows in use with 58 units or 8.66percent, while electricity makes up the remaining percentage.

Transportation

Motor gasoline currently accounts for 25 percent of the total energy btu's consumed in Vermont (Energy Information Administration, 2005). Road maintenance accounts for a large share of the Town's energy costs, and personal transportation requirements constitute the largest share of a family's energy costs. Energy demand for transportation can be influenced by the location and type of roads provided, convenience of services and facilities, structuring of routes for school buses, and the siting of new residential development.

Commuter parking is available in Sheldon Springs. Some of the Region's large employers run commuter vans which stop in Sheldon. Pedestrian and bicycle travel has been greatly enhanced by the conversion of the Missisquoi Railroad bed to the Missisquoi Valley Rail Trail. The commuter lots provide parking for the recreation path.

The Town has a road policy, which requires private or Class 4 roads to be brought up to specifications before take-over.

Land Use

The way that buildings are sited and constructed can affect the amount of energy needed to access and use them. The concentrated development within a village is meant to optimize the efficient delivery of services.

The Planning Commission and Board of Adjustment have opportunities to encourage energy efficient siting and design during their review processes. The

planning commission could review subdivisions under the site plan review process, and adopt standards, which require that a minimal amount of roadway be developed to access lots. The number of curb cuts allowed per property could be limited to encourage land owners to plan their developments and consolidate the number of road access points. The planning commission could also encourage new homes in a development to be clustered close together by requiring that subdivision of three or more lots apply for a permit as a Planned Unit Development, or by giving a density bonus for clustering homes.

Renewable Energy Sources

The use of renewable energy resources from local sources can provide cost-savings and reduce environmental impacts in Sheldon. Local, renewable energy sources include wind, solar, biomass and hydroelectric. Energy can be generated from these sources at different scales. Federal and State incentives can also make renewable energy a more cost-effective option. Opportunities to include renewable sources of Sheldon should be considered.

Recommendations

- ◆ Check weatherization status of all municipal buildings and submit nomination to Regional Planning commission for municipal building energy audits.
- ◆ Consider energy costs when purchasing municipal equipment and vehicles.
- ◆ Consider conducting site plan review for subdivision of land within the town in order to encourage better planning and layout of new development.
- ◆ Explore options to increase generation and use of renewable energy sources.

CHAPTER 12

HOUSING

GOAL: TO PROVIDE SUITABLE LAND AREAS FOR RESIDENTIAL DEVELOPMENT TO SERVE THE NEEDS OF CURRENT AND FUTURE SHELDON RESIDENTS

Policies

- ◆ Ensure adequate housing options for people of all income levels, ages, household types, and preferences
- ◆ Promote low-density residential housing in areas without municipal services and higher densities in parts of town with existing services or close to existing service boundaries
- ◆ Conserve and protect the vitality and quality of existing neighborhoods

Adequate and affordable housing is an important concern to residents in every town. There is a high demand for affordable housing in Franklin County but a limited supply in certain areas. Towns that are located in the southern tier of the County have a relatively small percentage of families below the County median income. Therefore, there is little housing that would be affordable to households earning the County median income. Town's that are more rural in nature often provide a large portion of the Regions' affordable housing.

Residential Growth

According to the U.S. Census large proportion of Sheldon's population (38.4 percent) is in the childbearing and home-buying age group between eighteen and forty-four. Much of the Town's population up to now has come from natural increase. This indicates that natives who wish to stay here and raise a family can generally find suitable housing at a price they can afford. However, net migration was positive for the first time in three decades from 1990 to 2000 as the housing market in Franklin County expands (see Figure 2 in Chapter 4).

The population boom predicted for Franklin County could affect Sheldon, causing population growth to reach levels not seen here since the 1960's. If this happens, new immigrants combined with the large number of young families already here could put considerable pressure on the market for housing and residential land.

Vacancy rates are a good indicator of whether a community has an adequate supply of housing. The vacancy rate (not including seasonal housing units) in Sheldon decreased from 5.1 percent in 1990 to 1.9 percent in 2000. Vacancy rates below 3 three percent are considered to be "absolute zero" due to circumstances such as substandard housing conditions. A vacancy rate as low at 1.9 percent indicates that housing supply is not filling the demand and causing a shortage. The median sale price for primary residences increased from \$96,000 in 2000 to \$153,000 in 2004, an increase of 59.4 percent over only four years. Between 2000 and 2004, the average annual wage increased by only 16.0 percent (\$30,991 to \$36,903). As high paying jobs in

manufacturing decline and more people are unemployed or take jobs in the lower wage sectors, fewer households will be able to afford to own a home.

Changes in the way people live and work will affect the Town's population and housing demands over the next five to ten years. As it becomes possible for more professionals to work at home using advanced computer and telecommunication equipment, agricultural communities like Sheldon will be viewed as even more attractive places to live and raise a family. Also, workers are increasingly willing to commute to work while enjoying a rural lifestyle in a small community. According to the Census, the number of workers commuting at least fifteen minutes from Sheldon to their jobs increased from 502 in 1990 to 678 in 2000.

Of recent concern is the housing market in Chittenden County which had the fourth highest job growth rate (of the fourteen counties) in the State during the 1990's. Chittenden County contains the State's largest city, Burlington, which has the greatest population density. Because the City and County have seen so much growth over recent years, people are being forced to seek housing outside of Chittenden County and into more rural areas like the Town of Sheldon. This will make it harder for towns in Franklin County, including Sheldon, to maintain their rural character. Another factor in the housing market is that Chittenden County has some of the highest property values in Vermont (majority are well over \$100k) and the tax rates (\$1.67 per \$100) are slightly higher than the State rate (\$1.94 per \$100). On the other hand, property values in Franklin County are generally below \$100k and also the tax rates in the County (\$1.42 per \$100) are generally below the statewide average. Sheldon's property tax rate was \$1.32 per \$100 in 1998 (VT Division of Property Valuation and Review 2005).

In light of all these complicated interactions, perhaps the safest course is to plan for some limited new residential growth and also for a diversity of housing options to accommodate changes in household size and composition.

The Town has few rental units. If additional population growth causes the price of residential land or homes to rise out of the reach of single people or older folks on fixed incomes, there may be a need for more alternatives to home ownership. These alternatives could take the form of accessory apartments or other types of multi-family dwellings.

Traditionally, Sheldon has not attracted much vacation or seasonal home development. While this may help to keep the price of homes and land down, it also means that the majority of the homes in town place year-round demands upon the town for services. The availability of municipal services and the quality of road access should be considered in order to determine the best areas in town for new residential growth.

The large amount of agricultural land and the Town's commitment to agriculture further requires local leaders to carefully consider the amount, density, and location of new residential growth.

Housing Units

The average number of persons per household in Franklin County has seen a decline since 1970 while the total number of households has increased during this same time period. The average number of persons per household has gone from 3.48 in 1970 to 2.94 in 2000. This amounts to a 15 percent decrease. At the same time, the population is increasing. Previously, when the number of persons residing in the same household was larger, there was less of a demand for housing and as long as the

population continues to increase, there is going to be a greater demand for housing units.

According to the U.S Census, there were 685 year-round housing units and only six vacation or seasonal housing units in Sheldon in 2000. Table 19 shows the number of housing units and the percent changes for year-round housing units in Sheldon and Franklin County.

	1980	1990	2000	% Change 1980-1990	% Change 1990-2000
Sheldon	482	599	685	24.27%	14.36%
Franklin County	14,159	15,181	17,251	7.22%	13.64%

Source: US Census

Affordable Housing Needs

The demand for affordable housing is something that needs to be addressed in all communities. Housing is considered affordable when a household earning 80 percent of the County median income pays no more than thirty percent of their income on housing. Lower income households have to get by on tighter budgets and because housing is a basic need that people cannot do without, high housing costs place a greater strain on lower income households than on households that are economically better off. Therefore, affordable housing initiatives generally emphasize the importance of providing affordable housing to households that are at or below the median income of the area.

Table 20 shows the affordability gap for households earning 80 percent of the median county income. It is computed by subtracting the median sale price from the maximum affordable mortgage (not more than 30 percent of the median county income). Sheldon has slightly higher affordability gap because the median sale price of primary residences in 2003 was higher than the median for the County. The high affordability gap indicates that there is not affordable housing available for the median Franklin County income earner in Sheldon. Town's with village areas, which often provide a significant number of rental units and multi-family homes, contribute substantially to the Region's affordable housing stack. An analysis done using local income levels will produce different results. In most cases, people who live in a town can usually afford to reside there.

	80% of Median County Income (1999)	Maximum Affordable Mortgage	Median Sale Price of Primary Residence (2003)	Affordability Gap
Sheldon	\$33,327	\$99,431	\$144,750	(\$45,319)
Franklin County	\$33,327	\$99,431	\$140,000	(\$40,569)

Source: NRPC draft Housing Chapter for the Plan for the Region, Table 5.10 (US Census)

Affordable Housing Opportunities

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

Public infrastructure contributes to the availability of low cost housing. In particular, sewer and water connections allow for higher densities and lower land costs by minimizing the amount of land that is necessary to accommodate new development. Affordable housing developers often depend on these public facilities to reduce building costs. The expense of drilling wells and designing individual septic systems significantly increases the price the developers require for their efforts.

Recommendations

- ◆ Develop measures to encourage higher density development in areas of town served by municipal water and sewer.
- ◆ Identify areas which can withstand higher density development and encourage new residences to be clustered by offering a density bonus for designs which conserve land and/or create efficient, economical housing.
- ◆ Review zoning ordinance to include accessory apartments and multi-family residences.

CHAPTER 13

LAND USE PLAN

GOAL: To MAINTAIN SHELDON'S RURAL CHARACTER AND SCENIC AND NATURAL RESOURCES WHILE PROVIDING SUFFICIENT SPACE IN APPROPRIATE LOCATIONS FOR ALL LAND USES IN LIGHT OF THEIR RESPECTIVE ENVIRONMENTAL NEEDS AND MUTUAL INTERRELATIONSHIPS

Policies

- ◆ Maintain the character of existing neighborhoods and avoid potential conflicts between incompatible land uses
- ◆ Limit development on slopes greater than 15% and maintain natural vegetation on slopes
- ◆ Discourage development where soils will not support it due to shallow depth to bedrock, instability, or high water table

Land is one of the basic components of the environment that affect life. It is also one of the three traditional "factors of production", with the other two being labor and capital. In more recent years, a portion of Vermont's economy has shifted from the natural resource industry to technology based businesses. As the types of businesses change, the value of land also changes. Previously, the productivity of a piece of land for farming or timber largely determined its economic value. Today, features such as access to major transportation networks; infrastructure such as water and sewage systems; and proximity to qualified labor markets all help in determining the value of land for economic development.

Much of Franklin County's eastern section, including Sheldon, is wooded, hilly, and well suited for forestry. Forested areas are beneficial for many reasons. Included are the economic livelihood of the rural communities, aesthetic and scenic value, carbon sequestration and natural habitat they provide. "Non-productive" uses of land, such as protection of wildlife, provide substantial benefits to society, ranging from the economic returns arising from tourism to the benefits of flood control to recreational opportunities. In addition, open land requires little in terms of municipal services.

Technological change also has an impact on land use. Current technology allows projects to be completed much more rapidly today than in the early years. The construction of roads and the use of transportation technology allow people and materials to move rapidly and reliably over the landscape. Telecommunication and computer knowledge further erases geographical limitations. Changes in State sewage regulations and the design of innovative sewage management systems also help in reducing the number of constraints on land development. Previously, land that was thought to have too many constraints can now be developed without much exertion.

Land use planning involves the consideration of the many possible types of land uses and the goals of the land users. The impacts of growth, development, and environmental change on the land should be taken into consideration before any

changes are made to the land. These changes will have a lasting effect on the community for years to come.

Current Land Use

The current arrangement of residential, commercial, agricultural, and industrial development within the town is a clear reflection of Sheldon's historic heritage. Sheldon Village, or Sheldon Creek, the site of the Town's first settlements, remains the municipal center of the Town. The Town offices, library, post office, and two churches form the core of the area. The streets are lined with large old historic homes. There is limited commercial development - a quickmart and a harness shop. The only remaining hotel building from the mineral springs era is now the Napoli Home for the Aged.

Sheldon Springs became a central focus for development at the turn of the century due to the water power offered by the falls. The mill and hydro facility form the nucleus of the area surrounded by a community of historic mill homes on small lots. The Springs now has its own post office, and the elementary school was established here in 1975. The Catholic Church, a number of small businesses, and the Town's major industry are also located here.

Another focus of commercial development is Sheldon Junction, located at the intersection of Vermont Routes 78 and 105. This area provides goods and services to regional residents and tourists. There is little residential development, and few farms. Businesses include agricultural implements and supplies, and a motel.

The remaining areas of town can best be described as neighborhoods of varying and distinctive character. Moving from west to east across town, the west end is low, flat land off Route 105. The soils are sandy. The area is characterized by a mixture of older farmsteads on very large acreage new development on lots of ten acres and under.

Bedardville is a newly developing neighborhood devoted to residences on larger lots. The area is located southwest of Sheldon Springs off Route 105. North Sheldon is an area of large farms and little new development. There are some home occupations in this part of town as well. The Abbey Restaurant, located on Route 105, serves as local and regional center for dining and meetings.

Shawville is the area north of Sheldon Junction off Route 78. The neighborhood consists of mostly older homes on smaller lots along the road. Crowe Hill is the eastern approach to Sheldon Creek. Just outside the extended village area, there is new residential growth on lots of about an acre. Further out, farms prevail, and there are a number of maple operations.

South Franklin consists of land along the route to Lake Carmi. While this is a major tourist route, the area is sparsely populated, and there is not much sign of new development. The area has shallow soils with ledge outcroppings. There is some commercial development along Route 105 including a machinery dealer.

Rice Hill, on the north side of Route 105, is also in the process of very gradual transformation. The soils here are shallow and stony, and consequently there are a number of old abandoned farms. The area also has some new homes on various-sized lots.

Duffy Hill is an area of town in transition. Along the western border with Enosburgh, the land is high offering scenic views off dirt roads. Development is proceeding, but sparsely on lots of ten acres and greater. At one time, East Sheldon had its own school and post office. Today, this part of town is limited to agricultural

operations and large land holdings. There has been some new development in this part of the Town during recent years.

Land Cover

Sheldon covers a total of 25167.17 acres or approximately 40 square miles. The majority of land cover in town is comprised of agricultural and forested land. Deciduous, coniferous, and mixed forested land accounts for 34.42 percent of the total area in Sheldon. While row crops and pasture comprise 48.92 percent. Table 21 is a list of how the land is divided up in the Town of Sheldon.

Table 21: Land Use Cover for Sheldon, VT (source: VCGI 2003)

Sheldon Town Land Use Land Cover		
	Acres	Percent
Residential	635.432	2.52%
Commercial	3.840	0.02%
Industrial	0.222	0.00%
Other Urban	1.110	0.00%
Transportation/Utilities	555.868	2.21%
Deciduous Forest	2775.090	11.03%
Coniferous Forest	2410.864	9.58%
Mixed Forest	3474.390	13.81%
Forested Wetland	887.444	3.53%
Non-Forested Wetland	289.169	1.15%
Row Crop	6736.496	26.77%
Hay/Pasture	5574.293	22.15%
Other Agricultural	28.333	0.11%
Water	1794.623	7.13%
Total	25167.174	100.00%

Limits to Development

Some areas of the Town are poorly suited for development due to physical characteristics or lack of adequate infrastructure. If developed, these areas may pose a hazard to the public health and welfare, affect property values of adjoining landowners, or place demands upon the Town for municipal services. The following are some of the limits that must be taken into account before development can occur:

Steep Slopes

- Slopes greater than 20% present considerable constraints to development. They are often covered by only shallow soils with relatively dense and brittle layer of silt and fine sands beneath. The necessary cuts and stabilization which is necessary to accommodate building foundations, parking areas, road access, and utilities are expensive and, unless very well designed, unattractive.
- Development on steep slopes can entail additional costs for the developer, the Town, and even adjoining property owners. Road maintenance, management of runoff, and erosion control may be problems on the site itself, and on adjoining properties both during and after construction. Slopes also pose

obstacles to public services such as fire, ambulance, and school buses, as well as providing extra challenges for road maintenance.

Shallow Soils

- Shallow soils pose limits to development in the form of increased site development costs, inability to filter wastewater, and difficulty in burying utilities below the frost line.

Unstable Soils

- Soils with high shrink/swell potential are considered of poor suitability for development because of their inability to provide a supportive surface for structures, roads, or paving.

High Water Table (Flood Prone Soils)

- Many areas in town have groundwater at or near the surface for part of the year. The ground water in these areas is more susceptible to contamination by the application of pesticides or fertilizers and leach fields from onsite septic systems. Once contaminated, these waters may present health hazards through public or private water supplies. They also may interact with surface waters in areas where they interact with streams and wetlands.

Flood Plains

- Development in the flood plain presents hazards to human life, health, and property. The flood plain also contains some of the Town's most fertile soils.

Agricultural Soils

- Large areas of prime and good agricultural soils that are present in Sheldon are a unique and irreplaceable resource. These soils support the lifestyle and economy of the Town. Development should be encouraged in areas other than those which are currently devoted to agriculture in order to conserve productive soils and limit land use conflicts.

Source Protection Areas (SPAs)

- Wellhead protection areas include the public water supply and the area, which contributes water to the well. Land uses which could introduce contaminants directly into the ground should be prohibited within these areas.

Shoreland

- The only shoreland in Sheldon is along the Missisquoi. This land is important in giving the Town its scenic beauty. The natural vegetation growing along the shoreline protects water quality by filtering silt and other potential contaminants. The trees and bushes on the banks of the river play an important role in keeping the water cool for fish. For both scenic and environmental reasons, a naturally vegetated buffer zone along the banks of the river should be maintained.

Wetlands

- Wetlands need to be protected from development because they are of crucial importance to the water system, both surface and underground. These areas regulate surface water flow by storing water during periods of high precipitation, and releasing it gradually over periods of low moisture. They help to prevent both flooding and draught. Wetlands also assist in maintaining water quality by filtering and purifying water before it enters either streams or the ground. In addition, the saturated soils of a wetland limit the ability of these areas to support development.

Remote Areas

- Areas that have little potential for the extension of public services and utilities and/or limited road access should be reserved for future use. Land use in these areas should be limited to agriculture, forestry, outdoor recreation, and residences on large lots. This will limit costs to the town of providing services such as road maintenance and emergency services, and allow Sheldon residents to plan ahead for future expansion.

Current Land Use Districts

The Town of Sheldon currently divides its land use into the following zoning districts: Sheldon Springs Village District, Sheldon Creek Village District, Industrial District, Rural Lands I District, Rural Lands II District, Rural Lands III District, Flood Hazard Overlay District, and the Wellhead Protection Overlay District. A complete description of all of these can be found in the Town of Sheldon Zoning Bylaws that were adopted in March of 2003.

Village Districts

- The purpose of this district is to maintain the Village of Sheldon Springs and Creek as a residential and commercial center. Municipal water and sewage disposal is available in Sheldon Springs Willage and water is available in Sheldon Creek Village, and development on small lots will be encouraged to take advantage of these services, as well as to maintain the traditional pattern of development.

Industrial Districts

- The purpose of this district is to set aside land for future industrial development in an area with good highway access and potential for municipal water and sewage disposal. Development of this district should be planned to take the greatest advantage of available land while limiting conflicts with surrounding land uses. Access to the area should be limited to one entrance and one exit onto Route 105.

Rural Lands I

- The purpose of this district is to provide opportunities for low-density rural development. These areas in combination with the village districts should meet local needs for residential and commercial growth over the next five years. Included will be lands with good highway access, lands adjacent to

existing villages, and lands currently committed to extensive rural residential settlement or commercial use. Some parcels or portions of parcels which fall within the designated district may, upon closer inspection, be limited in their suitability for development.

- Development within the district should be planned to minimize the number of access points onto town and state highways in order to maintain smooth traffic flow. Agriculture will still be a predominant land use in much of the district, and new development should be required to minimize potential conflicts with existing agricultural operations.

Rural Lands II

- The Rural Lands II District contains those areas within Sheldon that are most remote and are not needed to meet housing or other development needs over the planning period (5 years). These lands have especially high resource values easily jeopardized by urban or suburban development.
- Included in this district are Sheldon's most extensive wetlands, the Town's less accessible forested hills, and certain extensive managed agricultural lands furthest from the villages or from public highways. Land within the district has no access by improved public highways, and extension of utilities and emergency services to these areas would be costly. Generally, land within the district has one or more of the following characteristics: soils are either shallow to bedrock or are saturated with water for most of the year; soils which are especially well-suited to agriculture; soil conditions (high permeability or shallow depth) which suggest high potential for ground water recharge; land within the probable zone of groundwater recharge.

Flood Hazard Overlay District

- The purpose of this district is to prevent development which might increase flooding, and to reduce losses as a result of damage from flooding. Designation of this district is also required for the Town to be eligible for the National Flood Insurance Program. The overlay district imposes another set of regulations in addition to those which already apply to the districts described above.

Source Protection Overlay District

- In order to protect the Town's public water supplies, this district will be superimposed over those described above. The overlay district will restrict land uses which might impact surface or ground water quality. The district is delineated on maps supplied by the Vermont Agency of Natural Resources, Water Quality Division.

Proposed Land Use

The Sheldon Planning Commission proposes no changes to the current zoning districts at this time. The Planning Commission will review them again as part of the next plan or zoning bylaw update. A proposed land use map is included in this plan.

Recommendations

- ◆ Review zoning districts and change to correspond to land use plan.
- ◆ Allow home/cottage industry in residential districts according to standards established in zoning ordinance.
- ◆ Put conditional use and variance criteria in writing in zoning bylaw and use them when reviewing development applications.
- ◆ Consider expanding site plan review to include specific standards for access, landscaping and screening, parking, and traffic circulation.

CHAPTER 14

NATURAL FEATURES

GOAL: To Provide for Local Growth that is Compatible with the Town's Natural Features Including Soils, Landscape, Water Resources, and Wildlife

Policies

- ◆ Recognize the importance of the area's natural features to the overall quality of life enjoyed by Sheldon residents
- ◆ Limit development in areas where soils have limited capacity to support structures or filter wastes and in areas where the slope is greater than 15%
- ◆ Guide development away from productive agricultural or forest soils
- ◆ Protect the water quality of the Missisquoi River and its tributary streams by preventing erosion along their banks
- ◆ Protect ground water quality by regulating uses that could introduce contaminants into the ground such as septic systems, excavation activities, or underground storage tanks
- ◆ Limit the loss of local wildlife habitat
- ◆ Limit infringement upon wetlands
- ◆ Identify and protect areas where rare, threatened or endangered species exist

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

The Town of Sheldon is located within the Vermont Lowlands, a physiographic region that extends from the Canadian border in the north to the Poultney River in the south. The Adirondack Mountains to the west and the Green Mountains to the east protect the area from severe storms. The mountains, along with the low average elevation of the valley area and the proximity to Lake Champlain keep the climate mild. This region contains the largest amount of flat and gently rolling land in the state, mostly lying below 1,500 feet in elevation. Growing seasons are longer than other regions, and the soils are fertile.

Geology

Most of the rocks in the area are sedimentary or metamorphic. A major fault line runs northeasterly along Town Road #28 and the railroad tracks through Sheldon Springs to the Rice Hill area and into Highgate. The metamorphic rocks that were thrust upward by the fault are harder and more erosion resistant than the sedimentary rocks found in the western part of town.

During glacial times, until about 12,000 years ago, the land which is now Sheldon was at least partially covered by Lake Vermont. Glacial activity is responsible for both the topography and soils which characterize the area today.

Topography

Sheldon's elevation ranges from around 85 meters (280 feet) in the western part of town to a height of 345 meters (1132 feet) at the top of Duffy Hill on its eastern border with Enosburgh. The overall topography of the area is gently rolling hills. The center of town is dominated by low lands associated with the Missisquoi and its tributaries. Steeper slopes are concentrated in the southern and eastern parts of town. Sheldon Hill is a prominent landmark at 287 meters (941 feet). The banks of the Missisquoi are steep in places, and along the Enosburgh border slopes range between fifteen and twenty-five percent.

Slope conditions, the steepness of the land measured in number of feet of vertical rise over 100 feet of horizontal distance, are a major factor in determining the land's capacity of use and development. The Soil Conservation Service provides general guidelines for assessing slope limitations as shown in Table 22.

Table 22: Slope Classifications

0-3%	generally suitable for most types of development but may require drainage
3-8%	most desirable for development because these areas generally have the least restrictions
8-15%	suitable for low-density development with particular attention given to erosion control, runoff, and septic design
15-25%	unsuitable for most types of development and septic systems; construction costly; erosion and runoff problems likely
>25%	all types of construction should be avoided, careful land management for other uses is Needed
Source: Natural Resources Conservation Service	

However, the capacity of any particular site must be evaluated considering the interaction of slope with other features such as soils, vegetation, and existing and proposed land uses.

Soils

The soil groups which are present today in Sheldon owe their quality and distribution to the area's glacial history. Along the flood plain are soils that formed as the waters dammed by the glaciers receded. These soils are deep, level, moderately well-drained to poorly drained, and loamy. They are subject to flooding anywhere from once every five years to twice a year, and have a seasonal high water table. Most of these areas have been cleared and are farmed intensively.

Soils which were deposited by water on terraces and old lake plains are also found along the Missisquoi and its major branch streams. In the larger valleys above the flood plains on old freshwater lake beds are areas of deep, gently-sloping to steep soils composed of silt and clay. Development potential on these soils is limited by their poor drainage and instability. However, with some artificial drainage, they are suitable for cultivation and pasture.

The eastern part of town is dominated by soils which are deep, excessively drained, and sandy. These soils formed on beaches, deltas, and terraces. The level areas are good for cultivation, although somewhat dry with low nutrient content. Development potential on these soils is considered good with the exception of some areas where the water table is high.

Along McGowan and Goodsell Brooks are soils which formed in organic material and glacial till on hills and in depressions. They are deep, poorly drained, loamy soils with a hard, brittle layer underneath and stones at the top. The use of these areas for either development or agriculture is limited.

Large areas of Sheldon have soils which are deep, moderately-drained to well-drained, and loamy. These are upland soils which are suitable for agriculture with some artificial drainage. Their use for development is limited due to slope and the presence of a hard, brittle layer below the surface.

Adjacent to the areas described above are areas of shallow soils on bedrock ridges. Most of these sites are forested. Their development is limited by slope and rock outcroppings.

The discussion above is based upon the General Soil Map for Franklin County compiled by the Soil Conservation Service. This map is used because it provides a broad perspective of the soils and landscapes in the area and their suitability for general kinds of land use. The maps which accompany this plan are based upon detailed soils mapping, and can be used to more accurately determine the limitations and potential for different land uses on particular sites in the Town.

Earth Resources

Sand and gravel deposits are a valuable resource which will be of increasing importance. As the area develops, more of these materials will be necessary to expand infrastructure. At the same time, increased residential development in rural areas often conflicts with extraction activities. There is also pressure upon the Franklin County gravel market from Canadian purchasers. The Town's earth resources should be identified, and access protected so that they can be extracted if and when the need arises. The Town does not have its own source of gravel, and will be at the mercy of commercial sources as demand increases and prices rise.

According to mapping done by the Vermont Geological Survey, Sheldon has sand deposits of medium to good quality in the western part of town off Route 105 extending north into Highgate. There is a gravel deposit of medium to good quality containing less than twenty-five percent sand lying at about the center of the Town's eastern border.

Surface Waters

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

Since Sheldon has no major lakes or ponds, the Missisquoi River is the Town's principal surface water feature. The Missisquoi and its associated streams and brooks provide recreation, scenic views, wildlife habitat, and drainage for the surrounding

lands. All of these functions can be impacted by land uses in the river corridor or along shorelines. Maintaining the quality of the river is of extreme importance. Not only does it affect the Town, but also it has the potential to directly affect the Missisquoi River Delta and consequently, Lake Champlain.

The Vermont Water Resource Board categorizes Vermont's waters into three quality classifications:

Class A

- These waters have uniformly excellent quality
- They support contact recreation (i.e. swimming)
- They are suitable for use as public drinking water supplies
- They have high ecological value
- All water above 2500 feet in elevation are included here

Class B

- These waters exhibit good aesthetic value
- They support swimming and other forms of recreation
- They may be used as public drinking water supplies if filtered
- They are appropriate for irrigation and other agricultural uses

Waste Management Zones or WMZ (formerly Class C)

- These areas are protected
- They are used for the assimilation of treated wastes where water contact uses are not encouraged
- WMZ's extend for a minimum of one mile downstream of all wastewater treatment outfall areas

All waters not classified as Class A or as WMZ's are automatically Class B waters. Class A waters make up about three- percent of the State total. Vermont's waters are classified according to this system which establishes goals to be attained or minimum standards to be maintained, depending upon the present quality of a particular section of water. The majority of Sheldon's surface waters are Class B - suitable for drinking as long as filtration and disinfection measures are taken. Class B waters are also suitable for irrigation, swimming, and recreation. The Missisquoi River, as it passes through Sheldon Springs, and from the Tyler Branch to the Enosburgh border, is designated as a Waste Management Zone. The waters in these stretches provide mixing zones for treated waste water and are not suitable for water contact recreation.

The Department of Environmental Conservation, Water Quality Division has identified local sources of water quality problems which could threaten the use of the Missisquoi and its tributaries. The hydroelectric facility produces alterations in flow which can impact recreational activities and fisheries. Between Sheldon Springs Dam and Tyler Branch, agricultural runoff, streambank erosion, and hydropower flow alterations were identified.

Black Creek has been identified as a tributary which cannot support the uses associated with its Class B status due to agricultural runoff, nutrients and organic enrichment, pathogens, sedimentation and turbidity, temperature, aquatic weeds and

algae, loss of streambank vegetation, animal grazing, and allegedly failed septic systems. Tyler Branch exhibits many of the same problems.

Groundwater

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

The Vermont Geological Survey indicates that the area along Black Creek from Fairfield to the Missisquoi and west along RTE 105 to Sheldon Springs has excellent ground-water potential. However, some of the surface water quality problems present in this corridor may also affect ground water quality. Any activities which introduce contaminants directly into the ground - underground storage tanks, leach fields, agricultural activities - can affect ground water quality. Since surface waters may also travel underground, ground water can be contaminated by sources which introduce contaminants at the surface.

Wellhead Protection Areas (WPA's) are surface and subsurface areas that serve as natural recharge, collection, transmission, and storage zones for public water supply systems. The WPA's include a buffer, which incorporates the area through which contaminants are likely to move toward and reach the wells.

Sheldon has three WPA's, two in Sheldon Springs and one along Town Highway 4. Both of the Sheldon Springs areas are located along Route 105 in Sheldon Springs. Sheldon Water System is located along Town Highway 4 north of Town Highway 31. Both the Sheldon Springs water systems have potential sources of contamination including a sewage lagoon, an industrial dump, and a gas station. Potential sources of contamination for the Sheldon Water System include leach fields, the cemetery, and agricultural activities. The WPA's for local public water supplies are shown on the maps accompanying this plan. Uses that could impact ground water should be restricted within the WPA's.

There is limited ability to protect individual wells and springs due to the lack of detailed information about the location and flow patterns of ground water. It is important to require that private water sources be identified on site plans in order to provide the required isolation distances between conflicting land uses. As the number of residences in an area increases, it is also important to monitor well logs to ensure that ground water capacity exists to accommodate additional wells.

Wetlands

Wetlands are areas of land where soils are saturated with surface or ground water frequently enough to support vegetation which requires these saturated conditions for growth and reproduction. Such areas include marshes, swamps, sloughs, potholes, fens, river and lake overflows, mud flats, bogs, and ponds. Wetlands are identified according to vegetation, soils, and hydrology.

Wetlands perform many functions which contribute to the quality of both surface and ground water. They store flood water and storm runoff and often are the place where surface water enters the ground to renew ground water supply. Wetlands act as a

filter to remove contaminants as waters pass through on their way to streams or underground. They are also important to wildlife, fish, and plants, including a high number of threatened or endangered species. Wetlands are also utilized by humans for their recreational, scenic, historic, educational, and cultural values.

Vermont's wetland regulations are based upon the National Wetlands Inventory. They designate most of the wetlands identified by the inventory as Class 2, and require a fifty foot vegetated buffer between the wetland and any adjacent land development. The maps accompanying this plan show some of Sheldon's wetlands. However, if there is a chance that a site may be a wetland, the area should be surveyed by a soil scientist. According to Vermont's wetland regulations, the local zoning administrator is required to notify the Water Quality Division of the Agency of Natural Resources if any development is proposed in a wetland.

Flood Hazard Areas

Flooding is a natural occurrence. The Missisquoi River and many of its tributaries flood in the spring of each year when snow melts and the spring rains cause them to overflow their banks. Ice jams also cause flooding on the Missisquoi, contributing to field and bank erosion.

Residents of every town should be aware of the power inherent in a flood. Proper management should be used to ensure that critical floodplain areas are being used appropriately. Development within floodplains poses significant risks and should generally be avoided. River channels and floodplains function as a single hydrologic unit, periodically transferring floodwaters and sediment from one to the other. Appropriate uses of floodplains are those that can accommodate this cycle. Examples of uses that are appropriate to floodplains include agriculture, open space, and recreation.

The Federal Emergency Management Agency (FEMA) provides flood insurance under the National Flood Insurance Program (NFIP). In order for property owners to participate in the NFIP, FEMA requires that communities adopt flood hazard regulations. The Town of Sheldon has adopted land use regulations for flood hazard areas in order to protect the health, safety, and welfare of its residents and to allow the community to participate in the National Flood Hazard Insurance Program. Key minimum federal standards require that:

- All developments in the base floodplain must have a permit from the community Zoning Board of Adjustment. The definition of "development" refers to any human-made changes to the land, including new buildings, improvements to buildings, filling, grading, mining, and dredging.
- No development is permitted in the floodway, unless a registered professional engineer certifies that the development will not obstruct floodwaters and increase flood levels. The floodway is the central channel of the floodplain needed to convey the base flood.
- New buildings built in the floodplain must be protected from damage by the base flood. The lowest floors of residential buildings must be raised to or above the base flood elevation. Nonresidential buildings must be either elevated or flood-proofed.

It is also recommended that the following be done:

- support streambank stabilization efforts that reduce the risk of erosion
- vegetative buffer strips should be used

Deer Yards

Vermont's deer live near the northern limit of White Tail Deer range. They require specific winter habitat to survive severe weather and heavy snow. Deer wintering areas, or yards, have two features important for deer survival: shelter and food. The core area is usually made up of softwoods with southerly or westerly exposure, moderate elevation, and minimal human disturbance. Here, snow depth is limited, winds are buffered, and air temperature is higher. This shelter must be near to an area of mixed forest to provide browse. In addition, the deer must have corridors which link the yards together and allow them to move between summer and winter habitat.

Sheldon has just one area identified as winter deer range on a side hill extending down to McGowan Brook north of Sheldon Junction. However, other areas fitting the description above may also be providing valuable winter habitat, and sites should be checked on a case-by-case basis. Usually when development is proposed for a site which adjoins a deer yard, measures can be developed to limit impacts.

Natural Areas

According to an inventory conducted in 1992, Sheldon has two biological areas of statewide significance. Even though Sheldon Falls, originally one of the largest falls on the Missisquoi, has been destroyed by the dam, several rare and threatened plant species can be found on the bare rocks of the gorge. The islands and ledges in the Missisquoi River between Sheldon Junction and Highgate Falls, which are in private ownership, are also considered of biological significance.

Recommendations

- ◆ Consider slope and soils characteristics when considering areas for new development, and when reviewing individual development proposals.
- ◆ Require topographic lines on site plans, and request erosion control measures during construction.
- ◆ Survey local gravel deposits. Consider access issues. Consider developing a town gravel source.
- ◆ Create an overlay zone for wellhead protection areas to regulate land uses which might impact ground water for public water supplies.
- ◆ Require designation of water supply and septic system location on all site plans to ensure that proper isolation distances are maintained.
- ◆ Request assistance from the Water Quality Division of the Agency of Natural Resources if there may be a wetland on a proposed development site.
- ◆ Request assistance from the Vermont Department of Fish and Wildlife to make sure that development activities do not interfere with deer yards.

CHAPTER 15

TRANSPORTATION

GOAL: TO ENSURE REASONABLE, FUNCTIONAL, AND EFFICIENT DEVELOPMENT OF TRANSPORTATION SYSTEMS

Policies

- ◆ Protect the health, safety, and welfare of the traveling public
- ◆ Promote safe, convenient, economic, and energy efficient transportation systems including public transit options and paths for pedestrians and bicycles
- ◆ Promote transportation activities that respect the natural environment
- ◆ Maintain the scenic character of the Town's rural byways
- ◆ Support public transit efforts of the Northwest Vermont Public Transit Network to increase mobility and access of Town residents
- ◆ Support the efforts of the Northwest Vermont Rail Trail Council to promote, enhance, and increase use of the Missisquoi Valley Rail Trail

Transportation Planning

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

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

In 1991, the Vermont Agency of Transportation decentralized its planning process in order to provide for more local and regional participation. The Regional Transportation Advisory Committee (TAC) was then formed to help in the planning process. It serves in an advisory role to the Region's Board of Commissioners. Each of the Region's municipalities has the option to have a representative on the committee; Sheldon has chosen to participate and has a member on the TAC.

Town Road System

The Sheldon transportation map shows the Town roads and State highways located within the Town. Sheldon may require improvements in the form of paving,

widening, and the like in years to come. The decisions to perform this work should be made by the voters after local officials make recommendations and suggestions.

The Town of Sheldon currently maintains a total of 45.06 miles of roads – 15.99 miles of Class 2 highways and 29.07 miles of Class 3 highways. In 2004, the total road budget was \$262,061 or about \$5,924 per mile. The budget for the year 2005 is \$264,000 or \$5,967 per mile. In 2020, the road budget was \$402,500 or \$8,933 per mile.

A staff of three full-time employees performs local road maintenance. Equipment currently in use for road maintenance in Sheldon includes:

- ◆ 1995 Caterpillar Road Grader
- ◆ 2002 International Tandem Dump Truck with plow equipment
- ◆ 2004 LP Dump Truck with plow equipment
- ◆ 2005 Ford Pickup with V plow
- ◆ 2006 International Tandem Dump Truck with plow equipment
- ◆ 2009 John Deere Tractor Loader Backhoe

Road equipment is replaced according to a five-year capital budget and program. A replacement fund has been established to help cover purchases of new equipment.

The Town buys its sand and gravel from two private sources with the largest amount coming from Enosburg Falls. There are no long-term agreements which govern Sheldon's access to gravel and sand, or their cost. The current sources should be adequate for the next five years, but as existing sources are depleted, new sources become more difficult to access, and the number and quality of roads increases, prices will rise.

The Town is responsible for the maintenance of four bridges within its borders. Bridge #9 on Town Highway 1, was replaced in 1996. The State of Vermont paid ninety percent of the cost of the new structure, and the Town picked up the remaining ten percent. The Vermont Agency of Transportation closed the truss bridge on Bouchard Road TH 22, in 1998. The town roadmen using town equipment repaired the bridge in 1999. The bridge was upgraded from a three-ton capacity to an eight-ton capacity. The State of Vermont paid fifty percent of the cost while the Town paid the remaining fifty percent.

The Selectboard grants permission for access onto town highways. These decisions are made on a case-by-case basis with the advice of the road superintendent. There is no written policy regarding the number or placements of new curb cuts.

In order for the Town to take over private roads they must be brought up to town standards and the owner must deed the road right of way to the Town. In recent years, an increasing number of homes are being built off town trails. New home owners then desire town maintenance of the trail to their home. Town policy is that homeowners or developers are responsible for upgrading these trails back to Class 3 standards before the Town will maintain them.

There are 15.811 miles of state highway in Sheldon including Routes 78, 120, 105, and the Vermont State Park Road.

Railroad Beds

Rail service came to Sheldon in 1867 when the St. Johnsbury and Lake Champlain Railroads were chartered. This line became the Vermont Northern, and then the Lamoille Valley Railroad before discontinuing its service to Sheldon in 1989.

The Missisquoi Railroad also served the Town beginning in 1869. Eventually the Missisquoi became part of the Central Vermont Railway System. Railroad activity in Sheldon came to an abrupt end in June 1984 when the bridge crossing the Missisquoi River was severely damaged by a Boston and Maine train which had been routed through St. Albans. The abandoned railroad bed is now a 26.4-mile year-round recreation path known as the Missisquoi Valley Rail Trail. The trail runs from Richford to St. Albans.

Public Transportation

The Green Mountain Transit Authority (GMTA) operates a shuttle that runs from Richford to St. Albans, Monday through Friday. It makes several scheduled stops but can also deviate from the route up to ¼ of mile to accommodate specific needs by calling in advance. The scheduled Sheldon stop is at Pauline's Mobile in the morning and the evening. Riders can transfer to the Chittenden County Transportation Authority (CCTA) LINK at the last stop in St. Albans. The LINK connects to Burlington in the morning and evening on weekdays only.

Walking, Biking, and other Forms of Transportation

Bicycle traffic in and around the Town has increased in recent years. It has become a popular seasonal activity locally and in the surrounding areas. Sheldon has become a favorite destination for both bicycle tours and road riders from Quebec, Canada and other parts of Vermont. On many of the Town's roads, the mixing of bicycles and auto traffic is potentially very hazardous due to narrow roads, limited shoulders, sharp curves, and a variety of bicycle-unfriendly obstacles, such as guardrails and steep slopes. Local efforts to develop bicycle and pedestrian paths are currently underway in many communities including Sheldon. In 1995, Sheldon received funding from the Vermont Agency of Transportation to study rebuilding the sidewalks in Sheldon Village. The existing 100-year old concrete walks are discontinuous, overgrown with vegetation, and have been heavily damaged by tree roots. The report recommended providing new sidewalks on both sides of Bridge Street down to the bridge and on both sides of Main Street. Sheldon's application to construct the sidewalks was unsuccessful, but the need to update and modernize the sidewalks still exists. The Towns of Highgate and Franklin approached Sheldon in March of 2000 to explore the potential for connecting the Missisquoi Valley Rail Trail to Franklin, Highgate Center, and the Morse Line Border Station. These discussions are preliminary; however, they are clear indications that the Rail Trail has boosted interest in making Franklin County more pedestrian and bicycle friendly.

Other forms of transportation include motorcycle, and snowmobiles, and All Terrain Vehicles (4-wheelers). Out of 981 workers in town, fifty-five of them walked to work and none rode their bicycles. There were four workers who did use other means to transport themselves to work. The Missisquoi Valley Rail Trail, with a trail bridge and public transit connections, offers the opportunity to increase the number of people who walk, bicycle, snowmobile, or take public transit to work (ATV's are not permitted on the

Rail Trail due to safety and maintenance issues). Sheldon residents can use the trail to reach public transit stops. In 1999, the Northwest Vermont Rail Trail Council received assistance from the Vermont Youth Conservation Corps and District 8 of the Vermont Agency of Transportation to construct two parking areas along the Trail in Sheldon Junction and North Sheldon. The Sheldon Junction parking area, located adjacent to the Nutrite Plant, accommodates eight cars. Local residents use it as an informal park-and-ride lot.

Public Participation

A questionnaire was distributed in June of 1994 to local Select Boards/Trustees, Planning Commissions, Regional Commissioners, Municipal Clerks, and Managers in the Region as a means to gain local input on transportation issues. The people in the Town of Sheldon who responded to the questionnaire felt that the roadway conditions (traffic congestion and traffic safety) in their Town rated as good while roadway maintenance rated as fair. They listed Route 105/Woodhill/Mashia as a problematic roadway segment due to traffic delays or accidents. They listed Route 105 just east of Route 236 intersection as a problematic roadway segment because of high speeds. They also believed that the future of the Missisquoi Valley Railroad should be a rails-to-trails recreation path, which it has become. The maintenance of roadways, bridges, and culverts were all listed as high priorities along with passenger and commuter transport, Park and Ride lots, rest stops and information plazas, and bicycle and hiking trails.

Recommendations

- ◆ Consider a written access policy to help control unnecessary curb cuts and provide for consistent decisions about town road access
- ◆ Require that developers provide roads, culverts and ditching to state standards before offering lots for sale
- ◆ Consider how road access and quality influences development when amending zoning ordinance
- ◆ Start thinking about long-term sources of sand and gravel, potential for developing a local source
- ◆ Continue to participate in regional transportation planning efforts

CHAPTER 16

COMPATIBILITY WITH NEIGHBORING TOWNS

The Town of Sheldon is located in the northwestern part of the State in Franklin County. Five different towns, all of which are in Franklin County, border it. The Town of Enosburgh borders it to the east; Franklin borders it to the north, Highgate to the northwest, Swanton to west, and Fairfield to the south.

Land use patterns in all of these towns can affect one another in many different ways. It is important that all of their development patterns are compatible with each other. It is also important that each town's future development plans do not adversely affect their bordering neighbor's plans. The Sheldon Town Plan does not propose any major changes to its land use districts, and because of this, no substantial conflicts with adjoining Town Plans should arise.

A complete description of each town's land use districts can be found in each municipality's town plan and zoning bylaws.

Compatibility with Enosburgh

The Town of Enosburgh borders Sheldon to the east. Enosburgh completed its latest town plan in 2008. The Town has divided its land into the following districts: Village of Enosburg Falls District, Small Village District, Agricultural District, Rural District, Conservation District, Well Protection Overlay, Wetland Overlay, and Flood Hazard Overlay. The Rural Residential District and the Conservation District make up the majority of the border with Sheldon.

Compatibility with Enosburg Falls

The Village of Enosburg Falls borders Sheldon to the east. Enosburg Falls completed its latest plan in 2008. The Town has divided its land into the following districts: Central Business District, Recreation District, High Density Residential District, Commercial District, Industrial District, Low Density Residential District, Agricultural/Rural Residential District, Conservation District, and Flood Hazard Overlay District. The Agricultural/Rural Residential and the Low Density Residential of Enosburg Falls border the two municipalities, bordering Sheldon's Rural Lands II District. The Commercial District borders Sheldon's Rural Lands I District, where land uses may need to be monitored.

Compatibility with Franklin

The Town of Franklin borders Sheldon to the north. Franklin completed its latest town plan in 2007. The Town has divided its land into the following districts: Village District, Rural Residential/Agricultural District, Conservation District, Shoreline/Recreation District, and the Flood Hazard Overlay. The Rural/Agricultural District borders Sheldon's Rural Land 1 and Rural Lands 2 District's.

Compatibility with Highgate

The Town of Highgate borders Sheldon to the northwest. Highgate completed its latest town plan in 2010. The Town has divided its land into the following districts:

Agricultural District, Medium Density Residential District, High Density Residential District, Industrial/Commercial District, Shoreline District, Protected District, and the Forest Reserve District, Protected Areas District, Airport Overlay and Flood Plain Overlay. The Medium Density Residential District, the Forest Reserve District, and the Protected Area District make up the border between Sheldon and Highgate. While there could potentially be residential development in the Medium Residential District of Highgate, it should not be dense and therefore still be compatible with Sheldon's Rural Lands I and II districts.

Compatibility with Swanton

The Town of Swanton borders Sheldon to the west. Swanton completed its latest town plan in 2010. The Town proposed the following land use districts: Shoreland Recreation Area, Recreation/Conservation District, Shoreland/River District, Agricultural Residential District (R1), Moderate Density Residential District (R3), Residential District (high density, R5), Central Business District, Neighborhood Commercial District, Neighborhood Commercial Light District, Commercial/Light Industrial District, Industrial District and Southern Growth District. The Agricultural/Residential District of Swanton makes up the border between Sheldon and Swanton and is generally compatible with the Sheldon Rural Lands I and II districts.

Compatibility with Fairfield

The Town of Fairfield borders Sheldon to the south. Their latest town plan was adopted in 2009. The Town has divided its land into the following districts: Village Residential District, Conservation and Recreation District, Chester A. Arthur Historical District and Scenic Road, Flood Hazard District, Fairfield Waterfowl Refuge District (Fairfield Swamp), Lake District, Uplands District, Wellhead Protection Overlay District, and the Agricultural District. The Conservation and Recreation District along with the Agricultural District make up the majority of the border between Sheldon and Fairfield.

Compatibility with the Regional Plan

The Regional Plan was recently adopted in 2007. Many of the Regional Plan's goals and policies were based on ideas expressed in local plans. Though the goals and policies listed in the Regional Plan are consistent with the goals and policies that each town has listed in their own plans, they may be tailored somewhat to each town. This includes the Town of Sheldon, and because of this, the Sheldon Town Plan is considered compatible with the Regional Plan.

CHAPTER 17

IMPLEMENTING THE PLAN

One of the most important steps in developing a Town Plan is how the recommendations in the plan are to be implemented. Goals and policies were established for the following chapters of this plan:

- Chapter 5: Archaeological, Historic, and Scenic Resources
- Chapter 6: Community Facilities
- Chapter 7: Community Services
- Chapter 8: Community Utilities
- Chapter 9: Economy
- Chapter 10: Education
- Chapter 11: Energy
- Chapter 12: Housing
- Chapter 13: Land Use Plan
- Chapter 14: Natural Features
- Chapter 15: Transportation

When combined together, the goals and policies should support the “Visions for the Future of Sheldon” set forth by the plan in the beginning. The Town Plan should also be compatible with other plans in the surrounding communities. It should be noted that some of the goals set forth by the plan may take a substantial amount of time to complete. The goals may also require funding which may take time to acquire.

The Town has included recommendations at the end of each chapter. The recommendations include such things as considering the historic settlement pattern of the community when zoning land for development, updating the Capital Budget, developing a written policy regarding water extensions to water and sewer systems, upgrading and maintaining village utilities and services, considering energy costs when purchasing municipal equipment and vehicles, developing measures to encourage higher density development in areas of town served by municipal water and sewer, reviewing zoning districts and change to correspond to the land use plan, considering slope and soils characteristics when considering areas for new development, consider a written access policy to help control unnecessary curb cuts, apply for a planning grant, and rewriting and updating zoning bylaws. These recommendations should be reviewed and updated whenever necessary.

The Town of Sheldon can work with other agencies and organizations such as the Northwest Regional Planning Commission, the Vermont Agency of Transportation, the Vermont Agency of Natural Resources, the Vermont Agency of Housing and Community Affairs, and the Vermont Division for Historic Preservation to name a few. These agencies and organizations can help the Town in achieving the goals that were set forth in the Town Plan.

Citizen involvement is also a tool that should be used and encouraged. Citizens should be involved in local planning issues that may arise for they will be the ones most

likely affected by any changes that occur in the Town. Their input, ideas, opinions, and concerns should be taken into account when dealing with planning issues since they are the ones who have the most to gain from the Plan. Input from residents is very useful in deciding what the most pressing issues are in Town and also, where the Town should most likely be headed in the future.

Planning is an ongoing process that will require the efforts of many different people. The Plan will change over time and these changes should be taken into account on how they will affect the needs of the community in the years to come.