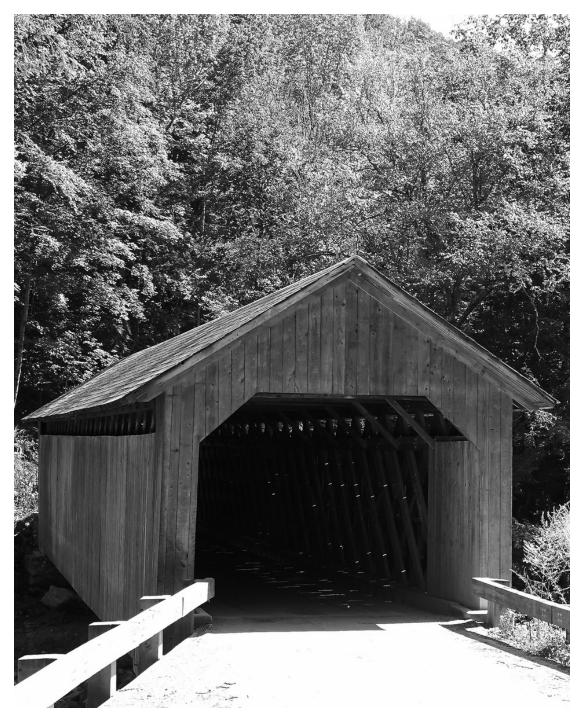
# **TOWN OF** SHREWSBURY, VERMONT **TOWN PLAN**



## SHREWSBURY TOWN PLAN & BYLAWS DATES:

DOCUMENT:		YEAR ADOPTED
TOWN PLAN		1972
		1978
		1985
		September 1, 2003
		December 12, 2008
	_	November 20, 2013
ZONING REGULATIONS		October 19, 1965
		March 5, 1968
	Interim	May 1, 1975
	Interim	May 4, 1976
		May 4, 1977
		May 1, 1978
		June 10, 1985
	Interim	March 6, 2002
		April 21, 2004
		July 1, 2009
SUBDIVISION		1971
		1988
UNIFIED ZONING & SUBDIVISION REGULATIONS		2017
SEWAGE		1987
FLOOD HAZARD		1978
		1990
		May 4, 2011

**TOWERS & TELECOMMUNICATIONS FACILITIES ORDINANCE - 2005** 

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## APPENDIX A:

Map 1: MUNICIPAL MAP, SHREWSBURY CEMETERIES

Map 2: FUTURE LAND USE

Map 3: NATURAL RESOURCES, MAP 1 OF 2 Map 4: NATURAL RESOURCES, MAP 2 OF 2

Map 5: **CONTOURS**Map 6: **AERIAL MAP**Map 7: **WATERSHEDS** 

Map 8: FUTURE LAND USE - FOREST BLOCKS & FOREST CONNECTORS

For this update, the Shrewsbury Planning Commission has retained the 2010 data for Shrewsbury's population, housing, and median household income. Population and housing data for the Town are available in ten year increments after US Census Survey data becomes available. Shrewsbury household income data, shown to coincide with the same 2010 period, is from the American Community Survey (ASC) 5-year estimates. Users of ASC data must be cognizant of the high margin of error of ASC data because it is information based on estimates after the last US Census. The Shrewsbury Planning Commission recommends updating this data after the 2020 Census information becomes available.

## 1. PURPOSE AND GENERAL AIMS OF THE PLAN

The purpose of the Shrewsbury Town Plan is to reflect the collective values and goals of the Town's residents and to develop policies designed to guide future development in harmony with these values and goals. The official adoption of the Plan represents a conscious community decision about the Town's future character, its priorities for land use, and its conservation of physical resources. This decision is based in large part on Shrewsbury's sense of identity as a Town and its residents' desire to carefully preserve those qualities that distinguish it.

Shrewsbury residents strongly believe that their community is a unique and special place. This perception gives rise to a sense of affection, civic responsibility and loyalty, and shared commitment to the Town's welfare. These are among Shrewsbury's greatest resources and most important assets.

The unique and special character of Shrewsbury is principally derived from the rural character of the community, its historical land uses and settlement patterns, and the natural beauty of its mountain setting, containing large areas of wooded and open land, wetlands, and other habitats.

The Town plan is designed to protect and reinforce all of these cultural and physical elements and, particularly, to preserve the rural nature of the Town by directing well-considered and controlled growth.

These aims are beneficial to both the individual landowner and the community at large, for it is the protection of the rural character and beautiful natural setting that underpins both the economic value and the aesthetic value of all land in the Town. Achieving these aims may, from time to time, involve conflicts in specific situations between a landowner and the community. Adoption of clearly stated ordinances will be helpful in minimizing such situations, and it is equally important that there be a variety of procedures and forums for discussion and a willingness to listen respectfully to one another, so that a full and fair consideration is given to the differing viewpoints.

The Town's existing rural character is partially an outgrowth of its agrarian past and is apparent in the uncrowded and tranquil social community. It also gives residents the sense of historic continuity. These qualities can be found and maintained only in a community that continues to cultivate a close association with the land and to nourish an appreciation and respect for both the productivity and the physical limitation of the natural environment. The Shrewsbury Historical Society and the Conservation Commission provide valuable education in the area.

Shrewsbury today is facing increasing pressure to develop. Shrewsbury is concerned about the impact of major projects within the Town and surrounding areas. On the western and northern boundaries expansion from Rutland could easily bring large-scale residential development that is in conflict with the historical settlement patterns into all areas of Shrewsbury. Shrewsbury residents are seeing major development of large stores along Route 7 in the vicinity of the Diamond Run Mall and are concerned about their impact. Shrewsbury may also experience development pressure on its eastern boundary due to growth associated with the Okemo ski area. Finally, major changes in communications technology already underway will bring pressure for home sites from

people in increasing numbers who will be able to link electronically with locations around the world. It now becomes increasingly important to re-evaluate the Town's goals and objectives and present them in a new Plan that accurately represents the Town's best collective thinking. The Town of Shrewsbury acknowledges the severe threat that climate change poses to every aspect of our daily lives and specific policies outlined in the town plan serve to address this serious concern.

The people of Shrewsbury recognize that Shrewsbury does not exist in isolation from the region and will be affected by what happens in the surrounding municipalities. However, the Plan does not suggest that Shrewsbury should reflect the type and intensity of new development occurring elsewhere; rapid or incompatible growth will destroy those qualities that make Shrewsbury unique. Through the implementation of the Plan, Shrewsbury can contribute to the region and the State by protecting and preserving a "special place" of a type that is becoming less common elsewhere. In so doing, the Town and its residents are exercising their best stewardship for these resources with which nature, geography, and previous generations have so abundantly endowed them.

## 2. LEGAL AND PROCEDURAL MATTERS

Vermont experienced rapid and often unplanned growth in the 1960s. In response, the Vermont Legislature enacted in 1968 the Vermont Municipal and Regional Planning and Development Act (24 V.S.A. Chapter 117). The Vermont State Legislature makes amendments to the Vermont Municipal and Regional Planning and Development Act on occasion which sometimes requires updating and amending the Town Plan in order to stay current.

The Vermont Municipal and Regional Planning and Development Act enables the legislative body of Shrewsbury to create a Town Planning Commission which may consist of no fewer than three nor more than nine members. Members are appointed for a 3-year term and serve without compensation. At least a majority of the Commission must be permanent residents of the community.

The Town Plan is the official policy of the community. Adoption of the Plan provides the legal foundation for the Town to establish growth and development regulations. It is intended that the Plan be used in a positive manner as a tool in guiding the direction of growth and development in a way which is both economically feasible and environmentally acceptable.

Because town planning is a flexible, continuing, and long-range process, the Shrewsbury Town Plan should be reviewed from time to time and be amended in light of changes affecting the municipality. The Town Plan will expire and have no further force on the date eight years from the date of adoption. The Plan may be readopted in the form as expired or about to expire, and shall remain in effect for the ensuing eight years or until amended.

As a policy document, the Plan provides both the legal and conceptual basis for all land use control. The specific controls are accomplished by the enactment of coordinated by-laws: 1) zoning and subdivision regulations; 2) flood hazard area by-laws; 3) capital budget programs; 4) official maps. Since the by-laws are intended to implement the

Plan, their content should reflect the findings, recommendations, and policy statements embodied in the Plan. (See Section 10, Program for Implementation.)

Use of the Town Plan is not limited to regulations and adopted capital budgets. A wide range of projects, either sponsored by the Town itself or by groups serving the Town, can implement the goals of the Plan to ensure that Shrewsbury's plans for its future are being coordinated. Programs or initiatives that further the purposes of the plan could include such projects as: the development of advisory commissions, which would address issues like affordable housing and historic preservation; the development of tax stabilization contracts, which would allow the Town to promote the growth of specific types of businesses; the municipal purchase of development rights, which could preserve undeveloped lands.

The following list of maps in the Appendix, together with those maps noted below that are on file in the Shrewsbury Town Clerk's Office, are made part of this Plan and incorporated herein by reference. It should be noted that these maps exist only as a general representation of existing conditions, to facilitate on-site analysis and the planning process.

## List of Maps in Appendix:

- 1. Shrewsbury, VT Municipal Map
- 2. Future Land Use
- 3. Natural Resources, Shrewsbury, Map 1 of 2
- 4. Natural Resources, Shrewsbury, Map 2 of 2
- 5. Shrewsbury, VT Contours
- 6. Shrewsbury, VT Aerial Photograph
- 7. Shrewsbury, VT Watersheds
- 8. Future Land Use Map Forest Blocks & Forest Connectors

## Additional Maps to be on File at Town Office:

- 1. Flood Plan map
- 2. Official Highway map
- 3. Parcel map (available in hard copy and electronically)

## 3. OBJECTIVES

It is the purpose of this Plan to guide future growth and development within the Town of Shrewsbury by providing a framework of planning policies and recommendations which will assure that decisions made at the local, regional, and state levels are consistent with the following objectives:

- 3.1 To protect and preserve the rural nature, scenic quality, and sense of community of Shrewsbury;
- 3.2 To protect public health and welfare and property values from air, noise, water and light pollution, and other disturbing physical influences;
- 3.3 To assure that basic needs of health, safety, education, housing, and recreation will be met and maintained at appropriate levels in accordance with the Town Plan;

- 3.4 To provide for the conservation and prudent use of natural resources, the protection of fragile areas, and the preservation of agricultural land, forest land, and wild lands. Wild lands are unsettled, uncultivated land left in, or returning to, its natural condition.
- 3.5 To protect and preserve scenic and historic features;
- 3.6 To maintain and encourage agriculture and forestry as a part of Shrewsbury and maintain agricultural and forestry land blocks large enough to support working farms and forests:
- 3.7 To require that public utilities be located and maintained in such a way that they will not have an adverse effect on the scenic quality, biological and general health, and land use in the Town:
- 3.8 To mitigate any incompatible or uncoordinated development activity;
- 3.9 To allow for future growth in a way that will meet the needs but will not place an undue burden, financial or otherwise, on the Town to provide community facilities and services:
- 3.10 To encourage that the Town and State roads permit safe travel within and through the Town in the least disruptive manner to the land and within the limits of Town financial resources and the State Scenic Road Act;
- 3.11 To maintain and improve aquatic and upland ecosystems, critical wildlife habitats and corridors, and unfragmented forest blocks and wild areas;
- 3.12 To encourage energy efficiency, energy conservation, and non-polluting renewable energy production.

## 4. LAND USE PLAN

## 4.1. Natural Factors

#### **4.1.1.** Geology

Bedrock Geology of the Shrewsbury, VT Area, by Charles A. Ratte, State Geologist.

The bedrock underlying the Town of Shrewsbury is composed of ancient metamorphic rocks of Precambrian Age (600 million years and older). The region has been mapped by William F. Brace (1953) and the results of his work have been published by the Vermont Geological Survey (see reference below).

The rock units mapped by Brace (1953) include the Wilcox Formation which is composed of a group of gray-to-black schist, buff-to-tan-colored dolomite and white-to-black gneiss about 3000 feet thick. This formation is exposed in out-croppings in the western part of the Town of Mendon and Shrewsbury and can be seen in exposure along Mendon Brook, Cold River and on Wilcox Hill. The major Precambrian rock unit

mapped by Brace (1953) is known as the Mt. Holly Complex. This unit is composed of metamorphic rocks known as gneiss, quartzite, schist, and marble. Gneiss is by far the dominant rock variety. An interesting bright green Schist with chromium-bearing mica is exposed in a small saddle on the north side of Round Hill in Shrewsbury (Brace, p. 27).

Several relatively young (110-130 million years old) igneous bodies of rock base intruded the older Precambrian rocks in the Cuttingsville area. These igneous bodies are referred to as syenite stocks. Iron, copper and molybdenum sulfide minerals as well as minor amounts of gold are known to be associated with these igneous intrusives. Exploratory core drilling in 1969 (see Doll, 1969) and 1982 on Copperas Hill east of Cuttingsville was not successful in locating sufficient minerals to constitute a workable ore deposit. A molybdenite prospect is known to exist on the northwest edge of Granite Hill southwest of Cuttingsville, and a granite (syenite) quarry is now abandoned in this same mountain (see Schmidt, 1978).

#### 4.1.2. Soils

Soil and water are basic components of the resource base on which all life depends. However, soils have a wide range of characteristics and capabilities. For example, impervious, shallow, or wet soils are generally unsuitable for subsurface sewage disposal, but they may be well suited for other uses, such as crop or timber production. Since certain soils act as a filter for sewage pollutants, it is important that development on these soils protect the environment from pollution.

There are 48 different soils in Shrewbury's 30,830 acres of land, as identified by the Soils Conservation Service (SCS). These soils are classified by both national and state classification systems. There are many groups, classes, subclasses, and value ratings. Each soil is named and differentiated by the slope on which it occurs. Each soil is rated for its agricultural value, forestry value, and septic value. Each soil is also rated as to its hydric properties (i.e., determining the extent of saturation of the soil during the growing season) and is categorized based on its hydrologic group (i.e., determining if the soil holds enough water during the growing season to support anaerobic growth).

Soils have numerous agricultural classifications and ratings. Some relate to the soil's potential or limitations for crop use. In addition to chemical and biological make-up, criteria determining a soil's agricultural value include erodability, flooding, wetness, dryness, shallow depth (to bedrock), stony condition, and steep slope location.

Agricultural soils are also nationally rated as "prime," (best combination of chemical and physical characteristics for growing crops), "statewide" (some potential but having some limitations for growing crops), and "local" (soils that have some crop-growing value at a very local level).

Shrewsbury has approximately 774 acres of "prime" soils and 3,382 acres of "statewide" soils, for a total of 4,156 acres. The location of these soils is shown on the Shrewsbury Natural Resources map located in the Appendix at the end of the Town Plan.

Geographic Information Systems (GIS) mapping has not only made the above data available in a quantitative form, but actually displays all of the soil classifications, as well

as current land use, on layered maps. These are now available, both on hard copy and digitally. This information is valuable because it enables one to see where each of these different soils exists in Town. One can tell, for example, whether a currently forested acre has good septic capability or if it is some of the Town's best agricultural cropland.

## 4.1.3 Topography

Shrewsbury is a hilly and mountainous town. Elevation ranges from about 725 feet on Mill River at the Clarendon Town line to 3,737 feet at Shrewsbury Peak on the Mendon Town line. The Town has about one-fourth of its total area above 2,000 feet. Other high peaks in Town include Jockey Hill (2,671 ft.), Robinson Hill (2,747 ft.), and Smith Peak (3,226 ft.). These are peaks in the Main Ridge of the Green Mountain Range. The higher elevations are the sources of many streams. Precipitation is greater at the higher elevations, and the ability of the aquifers to catch and hold water is vital to water systems affecting the Town and the region.

Cold River and Mill River drain Shrewsbury to the west into Otter Creek. The most eastern part of the Town is drained by tributaries of the Ottauquechee River. The stream valleys are the location of settlement centers and agricultural areas. Access north to Mendon and east to Plymouth in Windsor County is severely restricted by the topography. Access to the west to Clarendon is through the valleys of the Cold and Mill Rivers. There are several accesses south to Wallingford and Mount Holly. The following is a list of geologic and biological areas in Shrewsbury: 1) Spring Lake; 2) Molybdenite Prospect West of Cuttingsville; 3) Copperas Hill Mines; 4) Shrewsbury Peak; 5) Round Hill Fushsite Locality; 6) Deer Yard East of East Clarendon Village; 7) Black Swamp; 8) Clarendon Gorge.

## 4.1.4 Surface Water/Watersheds

Most of the entire 50-square-mile area of Shrewsbury is in the Otter Creek Watershed except for a small portion in the Northeast Corner, which is in the Ottauquechee and Black River Watersheds. The Mill River and the Cold River are the principal Otter Creek tributaries within the Town. Spring Lake, Cooks Pond, and Johnson Pond are the major natural bodies of water. Most waters are "Class B" with exception of any waters occurring above 2500' (e.g. Shrewsbury Peak, waters in Coolidge State Forest, Saddle Mountain, etc.), of which all are "Class A" by statute [Vermont Water Quality Standards, Environmental Protection Rule Chapter 29(a)], and all streams are "Upland Streams." Water quality is protected by state regulations which prohibit direct discharge of waste into streams and local regulations that promote the use of buffers and set-backs. The Vermont Agency of Natural Resources regulations should be consulted for detailed specifications controlling water quality.

## 4.1.5 Groundwater/Aquifers

Groundwater is found in two basic types of formations in Shrewsbury: metamorphic rock and nonindurated sediments of sand and gravel. The aquifers in rock are usually of low

yield (1-25 gallons per minute) and may be of considerable depth. The average porosity of the rock is generally low so that yields sufficient for home water supply are usually located in fractures or faults in the rock which are not always easily located. On the other hand, the aquifers in the alluvial materials, especially along the Mill River, have a much higher specific yield, are shallow in depth (75 feet or less), and are recharged by streams and brooks. Ground Water Favorability Maps, prepared by State Water Resources, indicate the general area of these aquifers which have excellent groundwater potential.

Some of the homes in the rural areas draw their water from springs, while others have drilled wells. The great majority of wells are in rock with depths averaging about 150 feet. The Shrewsbury Mountain School and Cuttingsville Fire District operate local water systems. Spring Lake Ranch and Crisanver House have private systems inspected and regulated under state guidelines.

#### 4.1.6 Forests

Vermont forests have seen steady regrowth over the last century due to westward expansion, the decline of the sheep industry, and reduced timber harvesting. Today's forests are the result of a major reforestation. Approximately 89 percent, or 29,000 acres, of Shrewsbury is in forest land, mainly Northern Hardwoods (maple, beech, birch), Red Spruce, Balsam Fir, White Pine, and various mixtures of these types with some small areas of mixed hardwoods (oak, hickory, maple), Red Maple/Elm-type, and other miscellaneous types, such as poplar. These large and small interconnected forest blocks support viable wildlife populations, recreation, economic uses, and clean water sources. Shrewsbury's soils are good to excellent for the growth of trees; many acres in federal, state, and private ownership are currently managed for timber production. At present, reforestation is slowing as commercial and residential development increases. This creates a situation where fragmentation becomes more apparent. For the first time in a century, Vermont is experiencing an overall loss of forest cover. While it is hard to pin down the exact amount of acreage, a US Forest Service report indicates Vermont may have lost up to 69,000 acres of forest land between 2010 to 2015.

## 4.1.7 Wildlife

The heavily wooded, rugged, and low-population characteristics of Shrewsbury make it one of the most important wildlife habitats in Rutland County. Wildlife species in all forms (both terrestrial and aquatic) are part of the broader ecosystem, and the health and function of both wildlife populations and wildlife habitat are essential to the proper functioning of the overall system. All wildlife species require three elements for viable habitat: food, water and cover. Even with these elements, viable habitat for some species is dependent on contiguous tracts of undisturbed land (e.g., core wildlife habitat). According to the DRAFT Act 171 Guidance, core habitat is a "combination of several different wildlife habitat types combined to form a unit of relatively continuous wildlife habitat. Areas characterized as Core Habitat generally consist of relatively large forested areas that might contain a combination of early succession habitats; forested riparian areas; wetlands and vernal pools; deer wintering areas (i.e. deeryards); mast stands; ledge, talus, or cliff habitats; and habitat identified by the Vermont Department of

Fish and Wildlife as either significant wildlife habitat or necessary wildlife habitat." Such areas not only accommodate core habitat species (e.g., scarlet tanager, hermit thrush, black-throated blue warbler, black bear, bobcat, spotted salamander), but also serve as species reservoirs that can serve to supplement populations of other wildlife species in smaller and more fragmented patches of habitat. Smaller tracts (especially forest) can serve as habitat if corridors connecting smaller and larger areas are preserved. Fragmenting habitat areas and the connecting corridors limits the availability and diversity of life supporting elements. As areas become isolated, species diversity may diminish, and certain species may be unable to recover when numbers become low. The status of viable and varied wildlife habitat is an important barometer of the Town's ability to maintain a healthy ecosystem, and the Town's rural landscape while accommodating growth. Shrewsbury's abundant forests contribute significantly to its wildlife habitat. The bear habitat is among the best in this section of the state, and Shrewsbury has been identified as a critical corridor for bear movement between habitat north and south. Deer are present in good numbers. Ruffed grouse are present where habitat is varied and in early stages of succession, and stands of poplar can be managed to encourage them. Waterfowl and woodcock nest on or frequent the natural ponds, beaver ponds, and wet areas throughout the Town. Wild turkey, mink, and coyotes are now well established. bear sightings are on the increase, and moose continue to be observed. The viability of these habitats is due to their interconnectedness.

## 4.1.8 Climate

The average annual precipitation in the Town ranges from 38 to 44 inches, with the smaller amounts falling on the lower elevations on the west side of the Town and increasing with the higher elevations on the east. Average annual runoff varies similarly from 16 inches of water on the west to 28 inches on the high elevations. Snowfall varies between 60-80 inches annually. Precipitation is fairly evenly distributed throughout the seasons. Temperatures range from approximately 20 degrees mean (Jan.) to 70 degrees mean (July), with extremes of -30 and 95 degrees Fahrenheit.

## 4.1.8.1 Climate Change

The subject of the Earth's changing climate is a topic of intense scientific research and widespread public policy discussion. Climate change resulting from increasing concentrations of atmospheric carbon dioxide due to fossil fuel use poses an immediate threat to our town, to our society, and to the global environment and economy. Scientific evidence confirms that climate change is causing more frequent and severe storms and floods; wildfires, drought, and hot weather health threats; ecosystem disruption and species extinction; and changes in precipitation and growing seasons with potential impacts on agricultural, forestry, maple sugaring, and recreational skiing industries. Many of these changes are already occurring in Vermont or may soon be experienced.

Average temperatures in Vermont have increased with winter starting later and spring arriving earlier according to the Vermont Climate and Health Profile released by the Vermont Department of Health in 2016. Vermont's annual precipitation has increased by seven inches over the past fifty years. Extreme weather events have become more frequent with 18 federally-declared disasters

between 2007 and 2016 resulting in twice as many disasters as the previous ten years. Shrewsbury has and will continue to take actions to build resilience against the effects of climate change.

As hot weather increases, heat stroke and other health related issues are anticipated to increase state-wide. Hot weather emergency preparedness plans, increased planting of trees and vegetation, and modifying buildings to increase cooling can help Shrewsbury adapt. The Department of Health has recommended the strategy of building resilience against climate effects. Improving resilience to increased heat and extreme weather events will position the community well to respond to changes in our climate.

The Vermont Climate Action Commission's (VCAC) 2018 report offers recommendations on how Vermont can meet the reductions in greenhouse gas (GHG) emissions called for in the 2016 Vermont Comprehensive Energy Plan to combat climate change. There is a lot of overlap between energy strategies and GHG emission reductions. Increased weatherization, renewable energy resources, incentivizing electric vehicles, and improving bike and pedestrian paths are all strategies that reduce GHG emissions and decrease energy use. Other strategies recommended to reduce GHG in the atmosphere include land conservation, rebuilding soil health, and sequestering carbon in our forests and soils. The 2018 VCAC report states that more than half of Vermont's annual carbon emissions are being absorbed by the annual growth of these forests; however, that growth is declining. Shrewsbury has taken actions to promote forested areas and curb forest fragmentation, which will aid in sequestering carbon in our forests and soils.

Throughout the Town Plan there are policies that taken together initiate a strategy for resilience to protect both our natural resources and our quality of life against adverse climate effects. At the 2019 Annual Town Meeting, Shrewsbury residents strongly approved a resolution asking State officials to move decisively toward meeting renewable energy goals to reduce greenhouse gas emissions that are causing the planet's climate to warm.

## 4.1.9 Atmosphere

Shrewsbury's physical atmosphere is influenced by its air quality and noise and light pollution. Shrewsbury's air sheds (the physical boundaries that tend to shape air flows) correspond to the Town's watersheds. The ridges of the air sheds trap air and protect lower sections from wind. This allows lower sections to retain the heat of the sun and also trap air that has become polluted. Depending on the location of development and the type of fuels used, air sheds may concentrate pollution and impact air quality in Town. Air sheds also effectively trap the sound from engines, manufacturing equipment, and other human activities. The quiet and freedom from unwanted sound of Shrewsbury's air sheds is a valuable resource.

In the past, Shrewsbury's distance and topographic isolation from large population centers provided a unique resource in the darkness of its night sky. This resource has been diminished by increased amounts of outdoor lighting within Shrewsbury and

lighting of large-scale development in nearby towns. Consequently, residents have less opportunity to enjoy natural darkness and clear views of the stars above.

## 4.2 Socio-Cultural Factors Influencing Land Use

## 4.2.1 Population

Population is strongly influenced by the availability of work, housing, and transportation. In 1880 Shrewsbury contained several farming communities and had a population of 1,235. By 1960 the population had declined to 445, and the number of full-time farms had declined from 150 to 12. By 2000 the population had increased to 1,108 with only one dairy farm left. Several other small farms exist raising sheep and horses, but their owners do not depend on them for their livelihood. Now the majority of individuals in Shrewsbury earn their living out of town in such towns as Rutland, Ludlow, and Middlebury.

Census statistics for Shrewsbury in 2010 show a total employment figure of 514 with an unemployment rate of 6.1%. The Rutland Labor Market Area unemployment rate is 7.4%. Shrewsbury's median household income is \$64,550. In Rutland County the median household income is \$48,190. In Shrewsbury the median cost of a home is \$207,200. In Rutland County the median cost of a home is \$175,200.

Although the growth rate in Shrewsbury between 1980 and 1990 was 28%, between 1990 and 2000 the Town grew by only one person to a population of 1,108, and from 2000 to 2010 the population actually declined by 4.7% from 1108 to 1056.

At least 72% of the working population has graduated from high school, and at least 48% are college graduates (approximately 22% of Shrewsbury's working population's educational attainment is unknown). 15% of the population works in management, professional, and related occupations. 85% work in service, sales, agriculture and forestry, construction, and production occupations.

\*The data in this section is contained in the 2010 VT Department of Labor and the 2007-2011 American Community Survey.

#### 4.2.2 Present Land Use

Present land use in Shrewsbury is typical of hill-town farmland no longer being farmed. Except for current active farms, most land that ever saw the plow or scythe has reverted to forestland. Some of that forest is well established and productive, 11,449 acres, about 1/3 of the Town, is actively managed forestland under the State's Use Value Appraisal Program. Those areas more recently overgrown are still in the early stages of forest succession. Other areas are still mowed for the hay or the views they provide.

Public or quasi-public land under local ownership is associated with municipal buildings, firehouses, churches, cemeteries, schools, and parcels of land contributed to the Town. The total acreage in municipal or community organization ownership is approximately 400 acres, including 200 acres leased perpetually to the State of Vermont. Other land

uses include several transportation and utility corridors that pass through the Town. The Vermont Department of Forests, Parks, and Recreation supervises the Coolidge State Forest (3773.3 acres) and the Jim Jeffords State Forest (834.4 acres in Shrewsbury) which connects the Aitken State Forest in Mendon and the Coolidge State forest in Shrewsbury. The Vermont Department of Fish and Wildlife supervises the Plymsbury Wildlife Area (1571 acres) and the Clarendon Gorge parking area (54.4acres), and the U.S. Forest Service National Park Service maintains the Appalachian Trail corridor (2315.49 acres). The total acreage of these State and Federal lands is approximately 8,550 acres (The source of these acreages is the 2018 Town of Shrewsbury Grand List). The total acreage in Shrewsbury is 50.2 square miles (US Census data) or 32,128 acres.

With reference to the Coolidge State Forest, in July of 2008 the Vermont Department of Forests, Parks and Recreation and the Vermont Fish and Wildlife Department (Rutland North Stewardship Team) completed the Coolidge West Management Unit Long Range Management Plan. The Management Plan includes the Coolidge State Forest, the Plymsbury Wildlife Management Area, and the Tiny Pond Wildlife Management Area.

As indicated above, Shrewsbury is still essentially rural and is becoming increasingly residential. Since the adoption of a subdivision ordinance in 1988, more than 100 individual lots have been created. While this, in and of itself, does not constitute growth, it can contribute to forest fragmentation. These lots are likely to be developed in the future. Residential use represented only a small part of the land-use picture in the past. The large part of the land was necessarily set aside for other uses, while houses were built on land less well-suited to growing crops, etc. The character of the land played a significantly larger role in the determination of how it would ultimately be used.

A look at the larger pattern shows Shrewsbury's forests are being fragmented by rural sprawl. This phenomena occurs incrementally, beginning with cleared swaths or pockets of non-forest within an otherwise unbroken expanse of tree cover. Over time, non-forest pockets tend to multiply and expand. Eventually the forest is fragmented and reduced to scattered, disconnected forest islands. The remnant forest islands resulting from this fragmentation are surrounded by land uses that threaten the health, function, and value of those forest islands for animal and plant habitat, and for human use. As forest fragments become ever smaller, practicing forestry becomes operationally impractical and economically nonviable. In turn, Shrewsbury loses the corresponding and significant contributions that forestry makes to the Town's economy and culture.

An indication of the interest in forestry by landowners in Shrewsbury is that landowners have placed 11449 acres, in the Use Value Appraisal (AKA Current Use) Program (2018 Town of Shrewsbury Grand List). In addition, individual landowners, working with the Vermont Land Trust (VLT), have placed conservation easements on approximately 1,926 acres (2018 Rutland Regional Planning Commission GIS data). This VLT conserved land is still on the tax rolls, but development is strictly limited. While the creation of building lots has become a significant present-day use, the number of small farms is again increasing with sheep, goats, and horses replacing cows. In addition, small cottage industries are increasing, including the rejuvenation of several major Town sugar bushes.

#### 4.2.3 Economic Base

Timber, agricultural land, some mineral sources, and sand/gravel deposits are still a part of Shrewsbury's economic base, but the greatest resource Shrewsbury has is its land and its rural and scenic nature. This special land resource contributes to the local economy and that of the Region and State where tourism and recreation are the leading industries. The Town's challenge is to keep Shrewsbury predominantly rural. Small-scale agriculture and local home or "cottage" industries offer economic opportunities for Shrewsbury residents while reinforcing the basic rural economy of the Town. In recent years there has been an increase in local vegetable and fruit production with Community Supported Agriculture (CSAs), farmers markets, roadside markets, and local food coops selling local produce. Spring Lake Ranch, one of the oldest half-way houses in the United States, is the Town's largest employer.

## **4.3.1 Development Constraints**

An analysis of natural factors influencing prospective land use has identified certain elements that have historically placed critical constraints on development and will continue to do so in the future. The constraints imposed by some of these elements are described below with policies for prospective land use.

#### 4.3.1.1 Shallow Soils

Much of Shrewsbury has shallow depth to bedrock. Shallow soils present design constraints during the construction of roads, the clearing, paving, and re-grading of land, as well as the location, planning, and construction of homes and sewage treatment systems. Proper installation of these systems is necessary to prevent contamination of groundwater, seepage to the surface, or freezing of sewer and water lines. Once the vegetation is disturbed during construction, the soil cover is highly susceptible to erosion.

#### **POLICY 1 - Shallow Soils**

- 1. Septic systems shall be designed and installed in accordance with the State of Vermont Wastewater System and Potable Water Supply rules.
- 2. Septic regulations shall address the constraints that shallow soils present to septic system design.
- 3. Erosion control measures must be implemented on all sites.

## 4.3.1.2 Steep Slopes

Development on slopes in excess of 15% without proper precautions may threaten the stability of the property being developed and the quality of the surrounding property. Onsite sewage disposal hazards, soil erosion due to increased rates of runoff, and

landslides not only jeopardize the development in question, but are also a threat to the water supplies and properties of down-slope owners.

## POLICY 2 - Steep Slopes

- 1. State guidelines shall be followed for preventing soil erosion at construction sites. On lots where a substantial portion of developed area exceeds a slope of 15%, an erosion control plan shall be required.
- 2. Any development on slopes over 15% may be allowed only if it can be demonstrated by the owner that development and subsurface disposal of sewage will meet the appropriate state and local regulations, will not endanger any other water source, and will not cause erosion.
- 3. It is the policy of the Town to prohibit all development on slopes of 20% or greater.

## 4.3.1.3 High Water Table

Areas with a seasonal or year-round high water table close to the ground surface place very critical constraints on settlement. Use of subsurface sewage disposal in these areas can result in pollution of surface and ground water due to lack of sufficient unsaturated soil for adequate treatment of sewage. Cellars are frequently filled by excessive seepage of water.

## **POLICY 3 - High Water Table**

1. All septic systems shall meet Agency of Natural Resources waste water and water supply rules to avoid contamination of groundwater.

#### 4.3.1.4 Flood Plains

Flood plains pose inherent hazards to human life, health, and property. The major flood plains in Shrewsbury as designated by State and Federal mapping are along the Mill River and along the Cold River. The 100-year flood frequency is used as the standard for delineating flood hazard areas by the Federal Emergency Management Agency (FEMA).

An important function of floodplains is the storage and conveyance of flood waters. New development and the associated fill placed in a floodplain can obstruct flood flows and reduce the ability of the floodplain to store water, which can subsequently cause floodwaters to rise to higher levels on upstream and adjacent properties.

The National Flood Disaster Protection Act of 1973 requires: (1) the Town to regulate development in designated flood hazard areas; and (2) that property owners in flood plain areas purchase flood insurance. If the community or property owners fail to meet the National Flood Insurance Program (NFIP) requirements, then any federal and

federally related financial assistance for buildings in the flood plain will be unavailable to either the community or property owner.

The vast majority of flood damage suffered in Vermont is caused by fluvial erosion, not inundation. Without the expertise and tools to manage fluvial erosion hazards, towns have been helpless to break out of this cycle of repetitive and costly flood damages. On August 28, 2011, much of Vermont was dramatically affected by Tropical Storm Irene. This storm delivered upwards of 6" of rain, causing streams and rivers to overflow their banks, damaging and destroying roads, culverts, bridges, homes, and businesses. The storm exceeded the 100 year flood level.

#### **POLICY 4 - Flood Plain**

- 1. Shrewsbury shall maintain Flood Hazard Area Regulations to mitigate flood hazards and fluvial erosion.
- 2. Development in the Flood Plain shall comply with the Shrewsbury Flood Hazard Regulations.
- 3. Shrewsbury should take steps to reduce future hazards from occurring by adopting a Fluvial Erosion Hazard Zone overlay district. The zone would be scientifically defined based on the stream geomorphic assessment (SGA) data and would reflect the area needed for the stream to behave in a natural manner, with corridor planning and management.

## 4.3 Prospective Land Use

## 4.3.2 Fragile Areas and Natural Areas (See maps)

Fragile and Natural Areas are rare or irreplaceable natural resources. These areas may have significant or unique value for biological habitat, scientific research, educational, aesthetic, and recreational purposes, or may simply be an area especially valued by Townspeople. Because these areas contribute to maintaining the environmental health and quality of the Town, such areas require special conservation and protective measures.

## 4.3.2.1 Elevations Above 2000 Feet (See Fragile Areas map)

As part of the Green Mountain Range, the land in Shrewsbury rises to relatively high elevations, with Shrewsbury Peak being one of Vermont's highest peaks at 3,720 feet above sea level. On high elevations, generally above 2,000 feet, precipitation is greater, air and soil temperatures are lower, soils are shallow and low in nutrients, slopes are steep, and fewer varieties of plants exist. Such characteristics create an environment which is intolerant of intensive use or development.

Excessive erosion may result when these high-elevation areas are disturbed because the few natural species of plants at these altitudes grow quite slowly, thus reducing their ability to control erosion.

These high mountain areas play a vital role in the water cycle. The greater amounts of precipitation filter through the thin soils, eventually reaching major groundwater supplies. Uses which result in excessive soil compaction or the removal of vegetation or soil cover are especially detrimental to the natural drainage of water. Also, the natural topography of Shrewsbury is such that the high elevation peaks and ridgelines that bound Shrewsbury's watersheds on the north lie not within Shrewsbury, but in the neighboring town of Mendon. While beyond the direct control of Shrewsbury's Town Plan or Zoning Ordinance, settlement or development on these adjacent lands may directly and adversely affect the Town of Shrewsbury, the health, safety, and welfare of the Town's residents, and the aesthetic and scenic resources of the Town.

#### **POLICY 5- Elevations Above 2,000 Feet**

- 1. Elevations above 2,000 feet shall be protected with respect to intensive uses and commercial recreation. The Shrewsbury zoning bylaws shall require a site review procedure for development at elevations between 2,000 and 2,300 feet in order to assure that any development in these zones will not adversely affect the fragile ecosystems and scenic quality of the terrain. No development of any kind shall be allowed over 2,300 feet.
- 2. The Town of Shrewsbury should work closely with other municipalities in the region in planning and reviewing development along the Town's boundaries. This would include participation in Act 250 and Section 248 hearings, in local zoning proceedings and in regional discussions as appropriate to achieve these goals and to safeguard Shrewsbury's interests.

## 4.3.2.2 Wetlands (see Fragile Areas map.)

Wetlands in Shrewsbury are extensive, including (but not limited to): Fletcher Swamp, Johnson & Cook's Ponds, Hebert Swamp, Elliot House Beaver Pond, and Black Swamp. These areas fulfill many important functions. Because of their high water-absorptive and holding capacity, they serve to retain runoff, thereby reducing the hazards of flooding and providing an important link in replenishing groundwater supplies. These areas are commonly known as ponds, bogs, fens, marshes, wet meadows, shrub swamps, and wooded swamps. Wetlands often occur in association with lakes, ponds, rivers, and streams, creating transitional areas between dry land and open water. Wetlands are the source of major food chains, thus providing a unique habitat for a wide range of wildlife. Many recreational and educational opportunities such as hunting, fishing, hiking, bird watching, and nature study are provided by these areas. The Town's zoning regulations require that any proposal for development or agricultural use should be set back by at least 100 feet from Wetlands. The Vermont Use Value Appraisal (UVA) program now recognizes riparian areas as one of six designated Environmentally Significant Treatment Areas which can be designated on qualifying UVA parcels, adding another level of protection to water resources in Shrewsbury.

#### **POLICY 6-Wetlands**

- 1. Wetlands will be protected from encroaching development, including roads and driveways, and disturbances harmful to wetland-dependent wildlife by restricting development and specific activities in wetlands and by maintaining and/or establishing undisturbed, naturally vegetated buffers around their edges. Wetlands in the State of Vermont are classified as class I, II, or III and are regulated by the State of Vermont and the Army Corps of Engineers.
- 2. The Town's zoning regulations shall require that any development or agricultural use be set back by an appropriate distance from the wetlands.

## 4.3.2.3 Water Resources, Shorelines, and Stream Banks

Shorelines and stream banks are fragile areas. Certain species of wildlife are greatly dependent upon the particular habitat of these areas. Vegetation along the water's edge acts as a stabilizing force, helping to prevent erosion and siltation and providing shade to water. All surface waters are under state jurisdiction. Building too close to shorelines negatively impacts stream ecosystems. Effluent leaching from septic systems placed too close to the water's edge can pollute ground and surface water. Moreover, development in neighboring towns could adversely affect headwater streams and aquifer recharge areas within Shrewsbury's boundaries.

Water quality is protected by state regulations which prohibit direct discharge of waste into streams and local regulations that promote the use of buffers and set-backs.

The Vermont Use Value Appraisal (UVA) program recognizes riparian areas as one of six designated Environmentally Significant Treatment Areas which can be designated on qualifying UVA parcels, adding another level of protection to water resources in Shrewsbury.

Vermont's Clean Water Initiative, Act 64, tasked the Vermont Agency of Agriculture with developing the Required Agricultural Practices (RAPs) to reduce the impact of agricultural activities on water quality across the State. The RAPs standards are intended to improve the quality of Vermont's surface waters and groundwaters by reducing and eliminating cropland erosion, sediment losses, and nutrient losses through improved farm management techniques, technical and compliance assistance, and, where appropriate, enforcement. The RAPs establish standards for manure and waste storage, soil nutrient management, and soil conservation. The RAPs standards establish requirements for vegetated buffer zones and livestock exclusion from surface water.

## POLICY 7 - Water Resources, Shorelines, and Stream Banks

1. Shorelines and stream banks shall be protected from uses that may reasonably be expected to cause erosion, increase water temperature, and reduce scenic qualities of surface waters or cause pollution. Any development endangering the natural quality of shorelines and stream banks shall be prohibited.

- 2. Water Resources shall be managed as necessary to include eradication and preventative control measures against invasive plants and pests that threaten Shrewsbury's water resources, shorelines, and stream banks. More information for landowners can be found at www.vtinvasives.com, or by speaking with the USDA Natural Resource Conservation Service.
- 3. An appropriate buffer zone shall be established and maintained for protection of streams, ponds, and lakes. No work shall be done that degrades a currently vegetative buffer zone along a stream bank.
- 4. No development or agricultural or forestry practice in Shrewsbury shall degrade or otherwise adversely affect the water resources of the Town.
- 5. The Town's bylaws should reflect and support the Vermont Required Agricultural Practices (RAPs) and shall encourage ongoing education in the RAPs.
- 6. Shrewsbury Zoning and Subdivision regulations shall meet or exceed the surface waters buffer zones defined by the RAP Standards for applications of soil nutrients and/or manure.
- 7. Shrewsbury Zoning and Subdivision regulations shall meet or exceed the RAP Standards in requiring maintenance of vegetative cover at surface waters.
- 8. Shrewsbury Zoning and Subdivision regulations shall meet or exceed the RAP Standards in limiting erosion at surface water banks and limiting livestock access to surface waters.
- 9. Watersheds shall continue to function as biologic units. Habitat and forests shall be interconnected and not fragmented.
- 10. Encourage owners and residents to work with the Planning Commission to prepare specific land use and development plans for their watershed. Once the owners and residents and the Planning Commission are satisfied that the plan for their watershed meets the policies of the adopted Town Plan, the watershed plan can be reviewed and approved by the Town for inclusion in the official land use regulations and plan.

## 4.3.2.4 Aquifer Recharge Areas

The quantity and quality of the Town's ground water supply is directly related to the type and intensity of uses that occur in areas of high aquifer recharge. Settlement can greatly reduce these areas of recharge and also increase surface runoff, thus decreasing infiltration of surface water. Also, the quality of groundwater may be threatened through numerous subsurface sewage disposal systems. Because a potable water supply of sufficient quantity is of critical necessity to life itself, these fragile recharge areas require protection.

#### **POLICY 8 - Aquifer Recharge Areas**

- 1. Aquifer recharge areas shall be permanently protected from uses and development that would significantly reduce their permeability or endanger the quality and/or quantity of groundwater supplies.
- 2. The location of soils that allow water to penetrate into the ground to form the ground water supply for Shrewsbury should be identified and shown on maps.

## 4.3.2.5 Critical Wildlife Habitat

Critical wildlife habitats are those areas that are necessary for the survival of a wildlife species at any period of its existence. Wildlife corridors link patches of wildlife habitat within Shrewsbury and the surrounding landscape, allowing the movement, migration, and dispersal of animals and plants and the functioning of ecological processes. Habitat connectivity at the local scale occurs where roads overlap with the network of connected habitat. In some cases, fish and wildlife movement associated with specific road crossing areas is seasonal, as evidenced by salamander spawning migrations in early spring. In other cases, movement could be simple happenstance of an animal curious for new food sources on the other side of the road. Many species of wildlife are selective to specific habitat conditions along roads and are faithful to crossing them in the same place as long as those habitat conditions persist. These crossing areas are often within riparian corridors adding to their ecological importance.

The wetlands areas within the Town fulfill an important function for many species. Habitats such as the Black Swamp, Fletcher Swamp, Spring Lake, and the area around Johnson Pond and Cooks Pond provide excellent cover and food. The remote, heavily wooded, rugged, and unpopulated sections of Shrewsbury, including the Calvin Coolidge and Jim Jeffords State Forests, the Plymsbury Wildlife Management Area, and Parker's Gore (the wildlife corridor in Mendon), also provide valuable wildlife habitat. In fact, Shrewsbury contains excellent habitats for bear, deer, bobcat, furbearers, moose, turkey, snowshoe hare, and other animals, which require large contiguous tracts of land for survival. Other wildlife habitats in Shrewsbury are important as well. Large tracts of open fields and meadows provide habitat for birds and rodents; early successional or transitional shrub and forest areas are an important habitat for many species, including deer and ruffed grouse. These two habitat types are largely ephemeral and dependent on land management practices. These two habitat types are best addressed through non-regulatory means (education, outreach, etc.).

Preservation of den trees and a good distribution of trees in various age classes over the entire area are critical to preserving a variety of wildlife species. The potential development of wild places in neighboring towns can eliminate essential habitat, corridors, and road crossings for many wildlife species. It is necessary that Shrewsbury protect its critical wildlife habitats, corridors, and wildlife road crossings if the Town wishes to enjoy the presence of a variety of wildlife and to ensure continued biodiversity.

In addition, lands in trust, or lands on which development rights have been sold or donated, offer a future guarantee for wildlife habitat's existence. The Vermont Use Value Appraisal (UVA) program (current use) now recognizes critical wildlife habitat as one of six Environmentally Significant Treatment Areas (ESTA's) for which landowners can designate portions of their UVA-qualifying lands.

## POLICY 9 - Critical Wildlife Habitat

- 1. Critical wildlife habitat and corridors (including, but not limited to, den trees and bear corridors, wetlands, deer yards, surface waters, streams) shall be protected from uses and settlement that reduce their vital biological function.
- Development should be designed and sited in a manner to preserve contiguous areas of active or potential wildlife habitat. Corridors connecting habitat areas for large mammals must be incorporated in plans for management and conservation of forested areas. Fragmentation of significant and necessary wildlife habitat shall not be approved.
- 3. Work with the VT Fish and Wildlife Department and other partners to conduct and maintain inventories of natural areas and wildlife habitat, with the help of Shrewsbury Conservation Commission and residents.
- 4. Work with the VT Fish and Wildlife Department to Identify and preserve connections, including wildlife road crossings, that would enhance existing wildlife habitat with the help of Shrewsbury Conservation Commission and residents.
- 5. Provide connectivity among natural areas and core wildlife habitat.
- 6. Landowners are encouraged to include forest management practices that will benefit wildlife in their Use Value forest management plans; to work with land trusts and non-profit organizations such as Vermont Coverts to protect critical wildlife habitat; and, if they wish, to apply for financial assistance in enhancing wildlife habitat (such as from the USDA Natural Resource Conservation Service).

## 4.3.2.6 Unique Geologic Areas

Unique geologic areas are uncommon formations which illustrate the past actions of natural geologic processes. As such, they have important educational and recreational value. Shrewsbury Peak, the Clarendon Gorge, Granite Hill, the Molybdenite Prospect west of Cuttingsville, and the Round Hill Fuschsite Locality are some of these areas in Shrewsbury.

## **POLICY 10 - Unique Geologic Areas**

1. Unique geologic areas shall be protected from any uses which would destroy or impair their scientific or non-commercial recreational value.

## 4.3.3 Resource Areas

## 4.3.3.1 Agricultural Lands

There are approximately 3,500 acres of prime, statewide important, and locally important agricultural land in Shrewsbury, of which approximately 774 acres are of prime agricultural soil. These lands represent the soils mapped by the USDA and Vermont Agency of Agriculture for soils that are suited for growing and agricultural potential. At one time, the Town of Shrewsbury was primarily an agrarian community, producing sheep, wool, and maple and dairy products. Only one commercial dairy farm remains, but the following commercial and/or personal forms of agriculture have been, and will continue to be, viable:

- Vegetable and fruit gardening, including CSA farming.
- Sheep and goat raising for wool, fleece, milk, cheese, and meat.
- Cattle raising for beef.
- Dairy farming for raw milk production.
- Maple sugaring operations.
- Tree farming for Christmas, ornamental, shade, and fruit stock.
- Specialty crop farming (herbs; fresh and dried flowers).

If maintained and encouraged, agricultural land use will continue to have a tremendously positive effect on the visual appeal and value of Shrewsbury's landscape and the productivity of the community. After 200 years of cultivation, many meadows cleared by the first settlers are reverting to forest or are being used for housing sites. Shrewsbury residents are truly interested in preserving the traditional rural character and scenic value of the Town. Therefore, the Town commits to preserving the remaining agricultural land and to assuring that farming remains a viable economic enterprise in Shrewsbury.

Whatever people do in Shrewsbury, they do it on soil. The more the requirements of Shrewsbury's land uses match the properties of the underlying soils, the more likely the Town is to have a productive, healthy, and vigorous community now and in the future.

Residential, commercial, or industrial development of agricultural lands provides at best a shortsighted benefit. Loss of productive land may reduce Shrewsbury's long-term ability to support its population. Conversion to non-agricultural use increases costs to the community and diminishes its capacity for agricultural production. Fragmentation of lands reduces their agricultural and natural heritage value.

In 2006, the State of Vermont developed Accepted Agricultural Practices, which are a base level of management guidelines for all farms in Vermont. Those management practices were designed to reduce non-point source pollution to surface waters from agricultural activities. In 2017, Vermont's Clean Water Initiative, Act 64, tasked the Vermont Agency of Agriculture with developing the Required Agricultural Practices (RAPs) to reduce the impact of agricultural activities on water quality across the State. All agricultural practices are required to meet or exceed the standards defined by the RAPs. Farms which meet the definitions of a Certified Small Farm are required to certify compliance with the Rules of the RAPs, while all persons engaged in farming and agricultural practices that meet the defined minimum threshold criteria for applicability are presumed to be meeting the Required Agricultural Practices Rules.

#### **POLICY 11—Agricultural Lands**

- 1. Agricultural soils are a critical resource and quality agricultural soils should be protected. The use of these soils for appropriate scale agricultural development is encouraged. Other development should be concentrated primarily on those soils low in potential agricultural value.
- 2. Agricultural land should be managed as necessary to control and eliminate invasive plants and pests.
- 3. Agricultural uses of the Town's agricultural resource land (Prime agricultural, Statewide, and locally important soils as derived from the USDA Natural Resource Conservation Service map) should be encouraged. Lands identified as agricultural lands on the SCS soils map are those lands having important agricultural resource value regardless of whether or not these lands are now in agricultural use. These lands shall be protected so that their full potential for farming may be preserved, whether it is realized at the present time or at some future time.
- 4. Settlement on and/or non-agricultural development on Prime agricultural land should be discouraged. Settlement on Statewide or locally important soils should occur only in locations, patterns, and densities that will not substantially reduce the area or the productivity of these lands.
- 5. The Town shall consider a variety of techniques to maintain the agricultural productivity of prime, state, and locally important agricultural soils:
  - Tax stabilization and incentives,
  - Agricultural protection districts,
  - Purchase/transfer-of-development-rights programs,
  - Assistance programs,
  - Town agricultural land revolving fund,
  - Assessment of farm and forest land at its use value,
  - Easements,
  - Planned Unit Development (PUD): A PUD is a mixed use development (residential, commercial and/or industrial) that often uses clustering of structures to preserve open spaces and allows flexibility to encourage new communities, innovation in design and layout, and more efficient use of land, to facilitate the adequate and economical provision of streets and utilities, and to preserve the natural and scenic qualities of the open lands of this state,
  - Open Space Development (OSD): Similar to Planned Unit Development (PUD),
     Open Space Development (OSD) recognizes the value of the open space and
     allows flexible lot development while protecting the open space,
  - Other flexible planning strategies designed to preserve agricultural land,
  - Land Trusts: A land trust is a tax-exempt, charitable organization working with landowners to facilitate land conservation and open space protection; i.e., purchase development rights, donation of development rights, land gifts, and community projects to protect public land.
- 6. The Town, through its Planning Commission, should develop a plan for farmland preservation and propose specific incentives to implement a farmland conservation program. As part of the program, the Conservation Commission or others should offer

voluntary assistance to land owners to help them preserve farm and pasture land for continued agricultural use. Fragmentation of agricultural land shall be discouraged.

7. The Town should encourage farmers and landowners to take advantage of existing State and Federal programs assisting the development and operation of viable agricultural operations.

#### 4.3.3.2 Forestlands

The Town's forestlands are an important resource for aquifer recharge, plant and wildlife habitat, recreation, and timber production. Properly managed forestlands provide income and employment for some Town residents, as well as recreation, wildlife habitat, and aesthetic benefits to the general public. If the Town is to promote the sustained productivity of its private forestlands for the benefits they provide, it should encourage sound forest management practices and should provide incentives for improvement of these private forestlands. The Town must have both unmanaged and properly managed forestland in order to support health and biodiversity.

A look at the larger pattern shows forests are being fragmented by rural sprawl. It occurs incrementally, beginning with cleared swaths or pockets of non-forest within an otherwise unbroken expanse of tree cover. Over time, non-forest pockets tend to multiply and expand. Eventually the forest is fragmented and reduced to scattered, disconnected forest islands. The remnant forest islands resulting from this fragmentation are surrounded by land uses that threaten the health, function, and value of those forest islands for animal and plant habitat, in addition to human use. As forest fragments become ever smaller, practicing forestry becomes operationally impractical, economically nonviable, and culturally unacceptable. In turn, Shrewsbury loses the corresponding and significant contributions that forestry makes to its economy and culture. In cooperation with the County Forester, the Town should seek to educate eligible forestland owners about available forestry assistance programs. Through distribution and display of printed information, the Town should encourage forestland owners to take advantage of existing State and Federal programs such as the Use Value Program (tax advantages for proper forest management), the Rural Forestry Assistance Program (free forestry advice on forest management), and Federal Cost-Share Programs (partial funding of costs of forest treatment). In cooperation with owners of well-managed forestlands, the Town could designate demonstration woodlots for educational purposes.

Because the Town contains a large quantity of public forestland, Shrewsbury is directly affected by the management practices and uses on these lands. Along with other benefits, the portions of the Coolidge State Forest lying within the Town act as a critical buffer zone to protect Shrewsbury from expanding commercial recreation and residential development in adjacent towns. As development infringes upon the surrounding wild places in Mendon, Killington, Bridgewater, and Plymouth, the remaining acreage of the Coolidge State Forest will become increasingly important to the region as a whole for its plant and wildlife habitat, aesthetic qualities, wild lands, and non-commercial recreation possibilities. The Appalachian/Long Trail corridor in Shrewsbury, managed by the US Forest Service, provides an undeveloped corridor of forestland that links Coolidge State Forest and the Green Mountain National Forest. This federal land provides a narrow but predominantly unfragmented corridor of forestland through the Town.

It is important to the Town that all public lands within its boundaries be protected and/or managed according to the highest standards of stewardship. Use of these lands should be consistent with a comprehensive long-range management plan that is adopted by the responsible State or Federal agency after reasonable opportunity for comment and input by the Planning Commission, the Select Board, and interested residents.

In cooperation with the Department of Forests, Parks, and Recreation, the Town shall seek to designate contiguous portions of the public forestlands as a Forest Preserve in order to maintain a viable expanse of public and private lands in natural, unfragmented, or unmanaged forest conditions.

Shrewsbury landowners with forestlands utilizing the Vermont Use Value Appraisal (UVA) program can now also designate portions of their qualifying parcel to manage portions of the land for six recognized Environmentally Significant Treatment Areas (ESTA's). The six recognized areas include: Natural Communities of Statewide Significance; Rare, Threatened, and Endangered Species; Vernal Pools with Amphibian Breeding Habitat; Forested Wetlands; and Old Forests. These recognized ESTA's allow landowners to manage portions of their parcels with these resources without prescribing timber management, but rather resource management for the protection of the identified ESTA or resource.

Accepted Management Practices for Maintaining Water Quality on Logging Jobs in Vermont (AMPs) were developed to implement Title 10 V.S.A. Chapter 47: Water Pollution Control, and were subsequently revised effective October 22, 2016. The AMPs are intended and designed to prevent any mud, petroleum products, and woody debris (logging slash) from entering the waters of the state and degrading water quality.

#### **POLICY 12 – Forestlands**

- 1. Development on productive forestland shall be concentrated in a pattern and density that does not substantially reduce the contiguous acreage available for sustained biodiversity and woodland productivity.
- 2. When land is subdivided, provision should be made to ensure access for future forest management and to avoid potential conflicts between land uses.
- 3. When properties are subdivided, minimize the impact of new development on interior forest areas, core wildlife habitat, and known wildlife corridors.
- 4. The Town should promote conservation and management of private forestlands by educating landowners about optimum forestry practices and available State forest management programs. The Town should request that the Conservation Commission, in consultation with the Vermont Fish and Wildlife Department; Vermont Department of Forests, Parks and Recreation; and non-profit organizations such as Vermont Coverts Woodlands for Wildlife educate landowners about the opportunity to include designation of Environmentally Sensitive Treatment Areas (ESTA's) in their Use Value forest management plans.

- 5. The Town should consider a variety of techniques to conserve undeveloped woodland, including:
  - Tax stabilization and incentives,
  - Forestry protection districts.
  - Purchase/transfer-of-development-rights programs,
  - Assistance programs,
  - Town forestland revolving fund,
  - Assessment of farm and forestland at its use value,
  - Planned Unit Development (PUD): A PUD is a mixed use development (residential, commercial and/or industrial) that often uses clustering of structures to preserve open spaces and allows flexibility to encourage new communities, innovation in design and layout, and more efficient use of land, to facilitate the adequate and economical provision of streets and utilities, and to preserve the natural and scenic qualities of the open lands of this state.
  - Open Space Development (OSD): Similar to Planned Unit Development (PUD), Open Space Development (OSD) recognizes the value of the open space and allows flexible lot development while protecting the open space,
  - Other flexible planning strategies designed to preserve forest land,
  - Conducting a forestland assessment to determine the significant forest blocks and wildlife habitat corridors.
  - Conservation Easements with a land trust or other conservation entity. A
    land trust is a tax-exempt, charitable organization working with
    landowners to facilitate land conservation and open space protection; i.e.,
    purchase development rights, donation of development rights, land gifts,
    and community projects to protect public land.
- 6. Forestlands should be managed according to sound, environmentally acceptable forestry practices, such as the preparation of formal forest management plans. Plans for clear cuts over two acres shall minimize the impact on wildlife habitat, erosion, sound buffers, lighting shields, and views from neighboring and distant properties. Forestlands should be managed as necessary to control and eliminate invasive plants and pests.
- 7. Use of State lands shall be consistent with a comprehensive long-range management plan prepared in cooperation with appropriate State agencies and Town officials and in compliance with the Town Plan.
- 8. The long-term objective for private and public forestlands in Shrewsbury should be the sustainable use of these lands, with consideration given to plant and animal wildlife, watersheds, timber and recreation. Harvest practices should be consistent with the same.
  - The Town shall seek to designate an area (or some areas) to be set aside as a Natural Forest Preserve, an unmanaged area for education, biodiversity, and sustainability.
  - 10. State and Federal lands in the Town shall not be sold, leased, or deeded to any person or organization for any form of development without prior consultation

with the Town. Where appropriate, the Town will adopt regulations to control subsequent use by the new owner or lessee.

## 4.3.3.3 Sky and Atmospheric Resources

The relative darkness of Shrewsbury's night sky is an increasingly unique resource which provides residents the opportunity to enjoy natural darkness and clear views of the stars above. Large population centers tend to emit a night-time glow that obliterates the visibility of stars and other heavenly bodies. This is directly due to high levels of outdoor lighting of a powerful and indiscriminate nature. In addition, residential and public lighting fixtures in Shrewsbury can create excessive and costly over-illumination and be hazardous when poorly positioned.

The following are typical problems incurred with outdoor lighting:

- <u>sky glow</u> -- light shines upward into the sky where it serves no useful purpose; sky glow also limits the visibility of the stars in the night sky;
- <u>glare</u> -- occurs when you can see light directly from the fixture, or bulb; glare creates a hazard rather than increasing safety because it hampers the vision of pedestrians, cyclists and drivers;
- <u>intrusive light</u> -- poor outdoor lighting shines off the owner's property;
- <u>energy waste</u> -- lighting which is stronger than necessary for its intended purpose and/or is poorly directed.

In addition, any expansion of the Southern Vermont Regional Airport could have a negative impact on Shrewsbury's air space with increased aviation traffic, noise, and air pollution. The development in Rutland Town along Route 7 has created an impact on the night sky in Shrewsbury. Expansion of this type of development without regard to responsible lighting policies is discouraged.

## **POLICY 13 - Sky and Atmospheric Resources**

- 1. Shrewsbury Zoning Regulations shall include criteria for outdoor lighting such as:
  - a. The angle of light shall shine only below the horizontal;
  - b. Light shall not create glare in the "line of sight;"
  - c. Light should not intrude into others' private properties or households.
- 2. The Town shall phase out or replace all existing public outdoor lighting fixtures that do not conform to the outdoor lighting criteria.
- 3. The Town of Shrewsbury shall actively participate in review of plans to expand facilities or aviation traffic, including, but not limited to, plans for flight paths and large commercial planes at the Southern Vermont Regional Airport.

#### 4.3.3.4 Noise Pollution

Excessive or frequent noise that carries beyond property boundaries can interfere with the rights of neighboring residents to enjoy the peace and quiet of a rural atmosphere.

The sources of noise are many, ranging from blaring music to machinery and chain saws. Some noise is inevitable, such as that related to farming or logging operations. Other noise is avoidable, or at least can be reduced to an acceptable level.

All Shrewsbury residents are urged to be thoughtful of their neighbors when engaged in any activity (such as sighting in deer rifles) or development (potential noise caused by a cottage industry, renewable energy system, or other regular/constant presences).

#### **POLICY 14 - Noise Pollution**

- 1. All Shrewsbury residents shall make every effort to mitigate any noise which they generate on their property so it will be the least disturbing to their neighbors.
- 2. Development shall not generate any regular and sustained noise which extends beyond the boundaries of the property boundaries on which it is located.
- 3. The Town's zoning shall make noise pollution one of the criteria to be considered when reviewing a permit application.

#### 4.3.3.5 Earth Resources

Shrewsbury has a number of rock formations with which several kinds of mineral deposits are associated. There are also several active and inactive sand and gravel pits in Town. The commercial extraction of minerals, oil and gas, or sand and gravel have a far-reaching economic and environmental impact.

#### **POLICY 15 - Earth Resources**

1. To the best of the Town's ability, the existing high quality of the Town's environmental resources, including, but not limited to, air, soil, water, and light shall be protected from any development or usage that adversely affects their quality. Extraction or exploration of earth resources, including oil, gas, minerals, and sand and gravel, shall be carried out in a manner that will not result in erosion, siltation, or pollution of ground-or surface water or cause negative impacts on the surrounding area due to noise, dust, lighting, or traffic. Extracted areas shall be kept free of waste materials and properly regraded and reclaimed as the operation proceeds.

## 4.3.4 Patterns of Land Use

The pattern and character of future settlement will be guided by the policies for settlement constraints, fragile area protection, and resource conservation. It will also take place in a manner which will be compatible with the rural nature, scenic values, and historic pattern of the Town. Settlement will be directed away from areas which are not favorable for settlement to locations which are more beneficial to the Town, both in maintaining its present high environmental quality and in avoiding significant cost increases in municipal services.

#### 4.3.4.1 Village Centers

Shrewsbury is still an overwhelmingly rural town with three main focal points of population and services. **Shrewsbury Center** is located on Lincoln Hill Road (the historic Crown Point Road was settled in 1780). As dairying developed, it supported one of the Town's cheese factories. To the north, the village of **North Shrewsbury**, locally called "Northam," developed along the Cold River Road, the Upper Cold River Road, the CCC Road, and Gilman Road. Northam had two cheese factories and numerous saw mills in the late 1800s. With the coming of the railroad in the mid 1800s, **Cuttingsville** became the business center of the Town. The collection of farms in the eastern part of the Town was called "Eastham." In 1940, Shrewsbury had 64 dairy farms. In 2003, it had only one farm that commercially produces milk. Several farms currently raise beef cattle, sheep, and horses.

- 1. **Shrewsbury Center**: Community Meeting House, church, three "bed-and-breakfasts," Town storage garage, two farms and a sugaring operation.
- 2. **North Shrewsbury (Northam)**: Town office, Town road maintenance garage, Town transfer and recycling center, Shrewsbury Mountain School (pre-school to grade 6), fire station, church, the Shrewsbury Cooperative at Pierce's Store, one bed-and-breakfast and a sugaring operation.
- 3. **Cuttingsville**: Stewart's Ford auto dealership, U.S. Post Office, Shrewsbury Library, Shrewsbury Historical Society, fire station, restaurant, hair-cutting salon, Bowman mansion, Laurel Glen Cemetery, one or two contractors' offices, a used furniture/items retail shop, a summer/seasonal farm stand and a sugaring operation.

A substantial and growing number of employment opportunities for Town residents are located in adjacent towns and Rutland City. With commercial and industrial growth in nearby towns, the bedroom community aspect of settlement in Shrewsbury has become more pronounced and the incidence of scattered development is increasing. Settlement should be encouraged in existing centers.

## **POLICY 16 - Population Centers**

- 1. The pattern of settlement shall maintain and reinforce Shrewsbury's three main centers as the focus of the Town. The density and character of settlement shall be compatibly integrated with the existing form of the three centers and the Town's rural and scenic pattern.
- 2. The Planning Commission invites residents of villages and neighborhoods to work with the Planning Commission to prepare development plans for their areas.

#### 4.3.4.2 Commercial Development

Shrewsbury's commercial makeup is a combination of commercial industries, small businesses, and home-based businesses dispersed throughout the community. Cuttingsville, on Route 103, is home to the largest concentration of commercial business activity in Town; however, without regulation, the possibility exists for commercial

enterprises on presently rural land, creating particularly intense and/or potentially negative impacts to the Town.

Some of the effects of businesses large and small that need consideration are:

- increased traffic
- elevated levels of noise or light
- industrial odors
- widespread or toxic emissions
- unreasonable demands on public utilities and municipal services
- · unacceptable quantities or types of waste
- visual impact of poorly planned industrial or commercial development in a rural setting and its effect on property values
- · loss of agricultural land and fragile areas

It is vital that the Town's zoning ordinances continue to address these issues and others that may arise.

## **POLICY 17 - Commercial Development**

- 1. Commercial development to provide retail, business, and personal services may be permitted.
- 2. The type and location of any commercial or industrial facility shall be carefully reviewed to ensure conformance with the objectives of this Town Plan.
- 3. The clustering of related and compatible commercial uses in suitable areas shall be promoted.
- 4. The Town shall encourage and promote the continuation of suitably scaled agriculture and forestry as viable activities.

#### 4.3.4.3 Rural Areas

The preservation of Shrewsbury's rural and agricultural nature and the maintenance of the viewscapes that give the Town its charm are threatened, both by the pressure of large-scale development, and by the gradual "parcelization" and subsequent development of the Town as a consequence of many individual and well-intended development decisions.

The charm of the New England landscape resides in the juxtaposition of clustered homes in a village setting with outlying farms and wooded areas. The danger where residential development pressure is significant, as it is in Shrewsbury, is that the important components of a working and natural landscape may be consumed by development that could be more appropriately sited in other locations. The Town seeks a rural rather than a suburban pattern of residential land use.

An approach to maintaining and promoting the Rural Residential Landscape might be found in one or more of the following techniques:

clustering development

- transfer of development rights
- use of planned residential and unit development
- conservation easements
- incentives to promote development in villages
- incentives to keep land in production
- combined driveways
- Vermont current use program
- protection of undeveloped areas.

#### **POLICY 18 - Rural Areas**

- 1. The retention of the Town's scenic and rural character is a primary goal. The density and location of rural settlement shall be guided by the policies set forth in this Plan and by the provisions of the Shrewsbury zoning bylaws and subdivision ordinance.
- 2. To assist landowners in complying with the objectives and policies of this Plan, the Town may consider setting up a voluntary "Site Assistance Program." This program would be carried out by a committee of Townspeople with skills in engineering, architecture, forestry, agriculture, and landscaping. The committee would advise landowners on ways to carry out planned development and construction so as to preserve agricultural and forest productivity and to protect the scenic quality of the Town.

#### 4.3.4.4 Conservation Areas

Conservation areas consist of all land subject to settlement constraints as defined in Section 4.3.1. These areas are based on the Natural Resources maps and include land subject to one or more of the following characteristics:

- (1) Shallow soils;
- (2) Slopes 15% and greater and less than 20%;
- (3) High water table;
- (4) Flood plains;
- (5) Meadowlands;
- (6) Deer yards;
- (7) Wildlife corridor;
- (8) Bear production habitat;
- (9) High elevation (2,000' and 2,300')

#### **POLICY 19 - Conservation Areas**

- 1. In conservation areas settlement may be permitted, but only with conditions related to the physical limitations present and with regard to the densities and locations recommended in the zoning bylaws.
- 2. Because the very criterion for Protection Areas is their uniqueness, any development will have to meet the guidelines expressed in Sections 4.3.1 and 4.3.2.

#### 4.3.4.5 Protection Areas

Protection areas are those areas designated on the Natural Resources maps. They are identified by their locally significant or irreplaceable qualities. These areas are considered generally not suitable for development.

Protected areas include:

- (1) Ridgelines
- (2) Slopes greater than 20%
- (3) High elevation (more than 2,300 feet)
- (4) Surface waters and wetlands

#### **POLICY 20 - Protection Areas**

1. Because the very criterion for Protection Areas is their uniqueness, any development will have to meet the guidelines expressed in Sections 4.3.1 and 4.3.2. The designation of Protection Areas shall continue to be a provision of permanent zoning regulations.

## 4.3.4.6 Residential Development and Acreage Requirements

Shrewsbury has used the technique of minimum lot size requirements to ensure that the intensity of development is appropriate to the different areas of the Town. While the goal of minimum lot size designation is understandable, the limitations and drawbacks are increasingly evident:

- \* Lot size has nothing to do with the protection of rural and scenic qualities. In some parts of Shrewsbury, even land parceled into large lots is inappropriate for the area, while in village centers, the smallest lots now utilized may be too large to retain compact settlement.
- \* A focus on lot size tends to divert attention from more important questions involving the configuration and inherent characteristics of the parcel being developed.
- \* Rigid lot requirements can lead to illogical land use decisions, such as not allowing the creation of a 3.9-acre lot in a 4-acre zone when in reality the smaller lot may be better suited, with appropriate boundaries, for development.

An optimal approach to guiding the nature and intensity of development would be one that would gradually move the Town away from minimum-lot zoning to a more flexible and case-specific approach. This could include a blend of acreage limitations and permitting appropriate development including clustering and density-based zoning.

#### POLICY 21 - Residential Development and Acreage Requirements

1. Acreage limitations should be abandoned in favor of targeted and flexible approaches that are better suited to the land use objectives set forth in this document. This should not be done, however, until an effective alternative system for guiding development is designed and put into place.

2. The review and approval of subdivision of land should follow the natural boundaries of physical or biological features when feasible.

# 5. PRESERVATION OF SCENIC AND HISTORIC FEATURES

#### 5.1 Scenic Features

## 5.1.1 Landscape Form

Shrewsbury is predominantly mountainous; thus, its topography includes:

- a) Ridgelines, mountain peaks and hilltops;
- b) Steep slopes;
- c) Intermediate slopes and terraces; and
- d) Valley floors.

# 5.1.1.1 Ridgelines, Mountain Peaks, and Hilltops

Ridgelines, mountain peaks, and hilltops are prominent features of the Town. These formations have influenced the courses of Shrewbury's streams and the land uses, most notably the location of the Town's villages and the physical pattern of agriculture. These features are a source of unspoiled beauty and contribute to the unique scenic and aesthetic quality of Shrewsbury. Shrewsbury Peak, Smith Peak, Salt Ash Mountain, Saddle Mountain, Copperas Hill, Robinson Hill, Jockey Hill, Angelo's Hill, and Kinsman Hill are a few examples of such landforms. Since they are often the focal point of distant or local views and panoramas, alteration of these features by settlement, development, clearcutting, and shelterwood cuts, could have a significant effect on the Town's physical landscape.

### POLICY 22 - LANDSCAPE FORM: Ridgelines, Mountain Peaks, and Hilltops

1. Settlement or development shall avoid locations on ridgelines, mountain peaks and hilltops, or higher elevations, or be sited and/or screened with conditions in a way that minimizes the visibility of manmade structures from other locations and does not impair the scenic nature of the Town.

# **5.1.1.2** *Scenic Steep Slopes*

Steep slopes are often highly visible from other locations in Town and are subject to problems with access, erosion, utility connections, fire protection, and sewage disposal, all of which increase development costs and some of which increase the burden on municipal services. Serious limitations to steep slope development include depth of soil, erosion control, and runoff, with emphasis on protection of neighboring land and water, as well as access for emergency vehicles.

#### POLICY 23: LANDSCAPE FORM: Scenic Steep Slopes

1. Settlement or development on steep slopes shall be restricted to densities and locations which will have minimal negative impact on scenic quality and municipal services and shall conform to Policy 2 for Steep Slopes.

#### 5.1.1.3 Intermediate Slopes and Terraces

Between the valley floors and the steep slopes lies a large portion of the land in Shrewsbury, which consists of more or less gently sloping land, small hills and terraces. It is in this intermediate elevation area that much of the human activity, past and present, occurs. Much of the good farm land lies within this band, interspersed with soils better suited for sewage disposal. Wetlands and beaver ponds lie among the wooded hills and open land, while stony pastures and cropland are separated by spring-fed streams, sugar lots, and productive forestland. Through all this run the miles of stone walls that still define land ownership and use.

#### POLICY 24 - LANDSCAPE FORM: Intermediate Slopes and Terraces

1. Subject to existing physical constraints, the area of intermediate slopes and terraces is most able to accommodate future growth needs of the Town in a manner consistent with the goals set forth in this Town Plan. Necessary growth should take place predominantly within this area subject to the goals and constraints set forth elsewhere in the Plan.

## 5.1.1.4 Valley Floors

Shrewsbury has only a small amount of the flat land associated with valley floors and this is found mostly along the Mill River and, to a lesser extent, the Cold River. The land of valley floors, or "bottom land," was traditionally prized for its high agricultural value. The Mill River valley retains much of its acreage as open and useful farmland while the Cold River valley has seen more of its area return to forestland. With the decline of farming, the use of the valley floors for residential development has increased. The narrow confines of these river valleys experience periodic flooding, which demands that development adheres to the flood plain regulations.

#### **POLICY 25 - LANDSCAPE FORM: Valley Floors**

- 1. Settlement of valley floors shall be restricted to locations that will have minimal impact on agricultural land and the scenic qualities of the valley.
- 2. The expansion of any existing roadway(s) should be prohibited.
- 3. Development shall be subject to guidelines set for floodway and floodplain areas by this Town Plan and Town's Flood Hazard Area Regulations. A Floodway is a channel of a stream, plus any adjacent flood plain areas, that must be kept free from encroachment

in order that the 100-year flood may be carried without any substantial increases and height. The flood plain is the height of the water level of the 100-year flood.

## **5.1.2.** Landscape Pattern

The landscape pattern of Shrewsbury is made up of a combination of elements:

- a) Villages;
- b) Open fields:
- c) Farms:
- d) Forestlands:
- e) Scenic views;
- f) Scenic back roads;
- g) Surface waters and wetlands;
- h) Trails; and
- i) Utility corridors.

## **5.1.2.1** *Villages*

Shrewsbury is still an overwhelmingly rural town with three main focal points of population and services. These are Cuttingsville, Shrewsbury, and North Shrewsbury.

# **POLICY 26-LANDSCAPE PATTERN: Villages**

See Section 4.3.4.1.

# 5.1.2.2 Open Fields

One of the most apparent aspects of Shrewsbury's landscape pattern is the contrast between open fields bordered by stone walls and the surrounding woodlands. Although agriculture is not the dominant land use in Shrewsbury today, it was and is the agricultural use of suitable lands that created and helps to maintain this important visual and economic asset.

# **POLICY 27 - LANDSCAPE PATTERN: Open Fields**

- 1. Agricultural and open lands shall be identified and shown on maps.
- 2. Any development in these lands shall avoid interference with possible agriculture to the greatest extent possible, shall be sited to minimize impairment of the scenic qualities of the landscape, and be in harmony with the natural terrain and vegetation.
- 3. Stone walls shall be preserved.

#### 5.1.2.3 Farms

Shrewsbury's landscape pattern has been largely influenced by the farm activities of the past. The isolated groupings of farm dwellings and outbuildings are characteristic of these activities. They provide focal points of scenic and historic interest. The traditional mix of open land, woodland, and farm or village cluster is threatened by the decline in farming activity. The contrast created by distinctly different land uses from one parcel to another is being lost to a repetitive pattern of emerging woodlands and residential development.

#### **POLICY 28 - LANDSCAPE PATTERN: Farms**

- 1. Emphasis shall be given to the preservation and encouragement of suitably scaled agricultural activities in Shrewsbury. The size, scale, or stocking level of agricultural enterprises should be appropriate in terms of such factors as the economic viability and ecological sustainability of the operation and the operation's off-site impacts of noise, odors, lighting, and potential air and water pollution.
- 2. The Town encourages organic farming.
- 3. The Town discourages factory farms.

#### **5.1.2.4** Public and Private Forest Lands

The principal state and federal lands within the Town are the Coolidge and Jim Jeffords State Forests, Plymsbury Wildlife Management Area, and the Long Trail/Appalachian Trail Corridor. They total approximately 7,714 acres (acreage figures from the 2013 Town of Shrewsbury Grand List). These lands are an important shared community resource. They encompass most of the higher elevation ridges and peaks that constitute the most widely visible features of the Town. Private landowners and the Town own the remaining forests.

#### POLICY 29 - LANDSCAPE PATTERN: Public and Private Forest Lands

- 1. The Town shall encourage preservation of the scenic vistas of forest lands and protect the scenic resources within them. The Town's official bodies, working cooperatively with State agencies for long-range management plans, shall include identification of scenic areas, wildlife habitat for game and non-game species (deer yards, bear, bird, and amphibian habitats), wetlands, fragile soils, wild lands, areas for quiet recreation, and techniques for their protection.
- 2. The Town should support transfer to public agencies of forest land that private landowners and non-profit organizations wish voluntarily to sell, donate, or otherwise convey for the purpose of conserving natural resources and/or allowing public recreation use.

#### 5.1.2.5 Scenic Views

Shrewsbury is well endowed with scenic views both within its borders and extending well beyond. The striking distant views are some of the best and provide a glimpse of the Green Mountains as they might have looked at the time Vermont was first settled. A pleasing contrast to these mountain vistas is provided by the near and middle-distance views within the Town. These views include the villages, farmsteads, ponds, meadows, and lower hills.

#### POLICY 30 - LANDSCAPE PATTERN: Scenic Views

1. The Town shall preserve these scenic views and cooperate with neighboring towns to preserve scenic views.

# 5.1.2.6 Scenic Back Roads

An important aspect of Shrewsbury is the network of back roads comprising the Town's highway system. The character of the roads themselves, their winding nature and borders of trees and stonewalls, as well as the views they often provide, is sometimes compromised by improvements (see Policy 42).

#### POLICY 31 - LANDSCAPE PATTERN: Scenic Back Roads

- 1. Improvements and maintenance of Town roads should be carried out in a manner that will protect and enhance scenic features while maintaining safety and durability. The Town should consider officially designating certain sections of road as "scenic" in accordance with the Vermont Scenic Highway Law. Planting and maintenance of roadside trees should be encouraged where appropriate, as should voluntary efforts to enhance the appearance of all roadsides, such as Green-up Days and restoration of stone walls.
- 2. Town roadways should be managed as necessary to control and eliminate invasive plants and pests.

### **5.1.2.7** Surface Waters and Wetlands

Rivers, streams, ponds, lakes, and wetlands are all of high scenic, recreational, and wildlife value. Activities in a watershed can affect the quality of the waters downstream.

#### **POLICY 32 - LANDSCAPE PATTERN: Surface Waters and Wetlands**

1. Surface water (streams, lakes, and ponds) and wetlands shall be protected from settlement and uses which would reduce their water quality and/or wildlife habitat, or despoil the scenic quality of their banks and shorelines.

#### 5.1.2.8 Utility Lines and Corridors

There are a number of utility lines and corridors within the Town. These include the railway corridor, a major electric transmission line corridor owned by Vermont Electric Power Company, and a Green Mountain Power line cutting across the southwest corner of Town. The trend in construction and maintenance of distribution lines serving residential demand is to follow roadways, rather than travel cross-lots as was the practice when farms represented the bulk of rural service. The Town discourages the use of herbicides in controlling the growth of vegetation in and around these utility lines and corridors.

# **POLICY 33 - LANDSCAPE PATTERN: Utility Lines and Corridors**

- 1. It is the policy of the Town to discourage new electric transmission or gas line corridors, or other new right-of-way for any new transmission lines to be constructed within the Town, except within the aforementioned transmission corridor right-of-way that exists at the time of enactment of this Plan.
- 2. The existing corridors shall be maintained to minimize soil erosion, maximize wildlife habitat, and protect the scenic and aesthetic qualities of the landscape. The Town, being concerned about water quality, discourages the use of herbicides and recognizes the need to maintain vegetated buffer zone around surface waters. The Town will continue to work with the Railroad owner to minimize all the biological impacts of the maintenance on the railroad's right-of-way.
- 3. Before construction or reconstruction of lines or other changes in the existing corridors are permitted, the applicant shall furnish a bond sufficient to permit and require the completion of all screening and other landscaping required by the Town, Public Service Board, or other Governmental body.
- 4. The Town shall continue to review all proposals to relocate, construct, or reconstruct utility lines within the Town with regard to locations, tree-cutting and trimming, scenic and aesthetic considerations, and natural resource considerations.

#### 5.2 Historic Sites

The historic sites in the Town of Shrewsbury provide an insight into the lives of the Town's early settlers. The surviving structures and sites constitute some of the Town's most valuable resources.

At present, historic sites and structures are offered a limited degree of protection under Vermont Statutes, Title 10, Chapter 151. In granting Act 250 permits for subdivision or development of land, the District Environmental Commission must find that the proposed project "will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, or rare and irreplaceable natural areas."\*

Implementation of Design Review Districts offers another means of protecting areas containing structures of historic, architectural, or cultural merit. Such districts may be

recommended by the Planning Commission and approved by the Select Board. Within such designated Design Review Districts, no structure may be erected, reconstructed, substantially altered, restored, moved, demolished, or changed in use or type of occupancy without approval of the project by the Development Review Board (DRB).

An inventory of the historic sites and a map are included. In addition to sites there are a number of original houses built in the 1800s which are of historic and architectural importance to the Town.

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*Vermont Statutes Annotated, Title 10, Section 6085. (REPEALED)
**Vermont Statutes Annotated, Title 24, Section 4407. (REPEALED)
***Title 10, § 6086 (8)
****Title 24, § 4414 (1) E
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#### **POLICY 34 - Historic Sites**

- 1. Structures and sites of historical significance shall be preserved or converted to new uses which maintain their architectural and/or aesthetic value to the community.
- 2. Shrewsbury Center, Northam Center, Brown Covered Bridge, and Cuttingsville are designated as historic districts. Construction in these areas requires compliance with historic district zoning regulations.
- 3. It is recommended that important historic sites be identified with plaques (by the Shrewsbury Historical Society or others) to encourage their preservation.

# 6. HOUSING

Shrewsbury's housing situation is influenced by the fact that many people prefer to live in an area like Shrewsbury that offers a rural lifestyle, yet is close to Rutland and other centers of employment, business, and entertainment. Shrewsbury is rapidly evolving from an agricultural community into a rural residential community, and this does not reflect the goals of the Town Plan. More people are living on small lots. The manner in which the Town accommodates new types of housing and the distribution of this housing in Town will partially determine the character Shrewsbury will have in the future. By looking at what housing is available, and at local population growth trends, the Town can anticipate and direct the housing growth that may occur.

# **6.1** Housing Inventory

Housing Inventory	1990	2000	2010
Occupied Housing Units	382	426	446
Vacant Housing Units	99	80	122
For Seasonal, recreational or occasional use	68	71	83
Total Housing Units	481	506	568
Owner Occupied	334	364	395
Renter Occupied	48	62	50

# **6.2 Population/Housing Trends**

Population/Housing Trends	1980	1990	2000	2010	Trends (2000- 2010)
Total Town population	866	1,107	1,108	1,056	Minimal population
					decline
Number of Households	289	382	426	446	Up 5%
Size of average household	3.0	2.9	2.53	2.3	Smaller
					households
Number of families	223	293	323	311	Down 4%
Number of children under 18	254	297	266	171	Down 36%
Number of adults aged 18-64	535	686	706	684	Down 4%
Number of adults over 64	77	124	136	201	Up 48%
Median age of residents	30.6	34.8	42.6	50.0	Up 17%
Median household income	\$15,875	\$35,000	\$48,472	\$60,179*	Up 24%
Median sales price of a home	\$41,300	\$91,000	\$109,800	\$85,900**	Down 22%
Median rent	\$250	\$436	\$456	\$786*	Up 72%
*American Community Survey 2005-2009					

<sup>\*\*</sup>Jan-June 2012

#### 6.3 Future Needs

The statistics above indicate that the Town's population decreased by 38 people from 2000 to 2010. At the same time, the median age of residents is increasing, and the Town must consider the needs of increasingly older citizens. In this connection, Vermont law does permit the construction of apartments and building additions to provide housing for older family members and elderly individuals. The Town recognizes the need for housing for its elderly population, thus the Zoning Regulations reflect this Vermont law.

Sites required to be reviewed by the Development Review Board will continue to be considered in relationship to the priority and capacity of the school, safe roads, fire and police protection, availability of water and septic-capable soils, and the impact on the Town's fragile areas and resource areas.

In spite of the current modest economic climate in Vermont, resort areas and accompanying development of condominiums and second homes in such areas as Ludlow and Killington increase the potential that developers will consider Shrewsbury as a potential area for building. Historically these projects do not serve the townspeople, but are aimed at the out-of-state buyers for use for short periods of time. They do not contribute to a stable year-round population. However, they do create a major impact on Town services such as road maintenance, fire prevention, and law enforcement responsibilities. Town costs, and therefore Town taxes, inevitably increase. Therefore, all development plans must be carefully analyzed and appropriate impact fees assessed.

# 6.4 Housing Affordability

Median Household Income	1990	2000	2010
All Households	\$35,000	\$48,472	\$60,179*
Renter Household Income (Specific Households)	\$22,500	\$22,206	\$35,833*
Owner Household Income (Specific Households)	\$38,167	\$45,938	\$62,917*
*ACS 2005-2009			

The Town recognizes the need for housing affordability.

The State of Vermont defines "Affordable Housing" as "an average price new home or an older house in good condition that a person with an average income ought to be able to buy or rent." The 2007-2011 ASC estimated median household income in Rutland County was \$48,190. In the case of households in Shrewsbury, it is clear that the median household income is significantly higher. However, if these numbers are split between renter households and homeowner households, although there is a significant rise in income for owners, the median income for renters has actually dropped somewhat. Given the steady rise in median rent, this poses a problem for housing affordability.

"Housing costs should be no more than 30% of a household's income. For rental housing, this includes rent and utilities (fuel for heat, hot water and cooking; electricity for lights, water and sewer charges, and trash removal). For home ownership this includes

mortgage (principal and interest), taxes, and property insurance." (Statement by the Department of Housing and Urban Development.)

"For example, a family of four, earning a total household income of \$34,000 should expect to pay no more than \$850 per month for rent, housing or house ownership expenses." (VT Assoc. of Planning and Development 2001: A Booklet for Towns.)

Affordable housing in Shrewsbury is limited because of the relatively high real estate and development costs for new homes, particularly since the Town does not have water or sewer services. However, some older houses do occasionally come up for sale. In addition, a variety of rentals are available. They include apartments and houses.

Shrewsbury is not a very suitable place to build subsidized single-family low-income housing, as the Town offers very few jobs and/or services, which makes it essential to own and operate at minimum one car per household. Notably, a recent affordable housing project in a nearby town in Rutland County, although heavily subsidized by both Federal and private funding, has proven to be unsuccessful in finding qualified buyers/occupants and/or those who would accept the terms of the sales.

The Town realizes that, in its planning, it must be responsive to the need for affordable housing to meet the needs of the variety of individuals and families who live in Shrewsbury.

## **POLICY 35: Housing Affordability and Housing for Elderly**

- 1. The Town Zoning Regulations must recognize the importance of housing affordability.
- 2. Construction and/or installation of a broad variety of housing alternatives from newly built homes to mobile homes will be permitted.
- 4. State statute allows for accessory apartments within or attached to single-family residences that represents a means to provide affordable housing in close proximity to cost-effective care and supervision for relatives or disabled or elderly persons.
- 3. The Town will consider amendments to zoning regulations which will alleviate the lack of affordable housing for renters, such as encouraging higher density development (such as Cluster Developments and Planned Unit Developments), which can reduce the cost per housing unit while preserving more open land than traditional development.
- 4. The Town will encourage the siting of higher density developments in village and hamlet areas.
- 5. The Development Review Board (DRB) will expedite the permit review process.
- 6. The Zoning Regulations will allow conversion of larger houses into multiple units.

#### **POLICY 36 - Siting of Residential Development**

- 1. The Shrewsbury Zoning bylaws shall specify maximum residential densities, to be determined in part through careful consideration of land capabilities and existing neighborhood characteristics.
- 2. Any residential development that places a disproportionate financial burden on the Town, or that endangers any fragile area, resource area, or water supply shall be prohibited.
- 3. The Planning Commission shall explore incentives for encouraging new housing to be located in existing areas of high density.
- 4. Encourage housing projects to set aside land for open space and conservation programs.
- 5. New housing shall be sited to preserve the natural, scenic, and agricultural aspects of the site as a priority.
- 6. The Town may establish design control districts (such as Historic Districts) with general design control regulations, which may include, but are not limited to, height, size, number of living units, density, and overall appearance.
- 7. Site plan approval shall be required before the start of construction of any structure, other than one- and two-family dwellings and their accessory buildings. The Town requires site planning at the time of subdivision.

# 7. ECONOMIC ACTIVITY SECTION:

### 7.1 Economic Base

Economic activity is crucial to sustaining the well-being of Shrewsbury's population and the vitality of the community. Shrewsbury's economic base is a combination of small retail, service, and hospitality businesses, as well as a variety of agricultural establishments, forestry, sand and gravel extraction, and home-based businesses dispersed throughout the community. Spring Lake Ranch, one of the oldest half-way houses in the United States, is the Town's largest employer. The largest concentration of economic activity is located in Cuttingsville on Route 103. The rural and scenic nature of Shrewsbury and the proximity to Rutland and services creates a desirable place for people to live and work.

Advances in technology have enabled more people to work from their homes while having jobs located in other parts of the state, country, or even the world. High speed internet and access to train and air travel have increased the potential for people to live and work in rural areas like Shrewsbury. Residents can work for a large company located in a city or can have a small home business and market their goods on the internet. This increases the economic opportunities in small towns and rural areas.

In recent years there has been an increase in local vegetable and fruit production with Community Supported Agriculture (CSAs), farmers markets, roadside markets, and local food coops selling local produce.

# 7.2 Workforce

According to the 2010 US Census 65% of Shrewsbury population is between 18 and 64. 2010 VT Department of Labor data shows at least 72% percent of the working population has graduated from high school, and at least 48% are college graduates (approximately 22% of Shrewsbury's working population's educational attainment is unknown). 15% of the population works in management, professional, and related occupations. 85% work in service, sales, agriculture and forestry, construction and production occupations. The median household income in Shrewsbury is \$60,179 which is higher than the State median income of \$51,841 and the Rutland County median income of \$47,027 (2010 Median Household Income Estimates from American Community Survey data found on American FactFinder (American FactFinder - Results).

According to the Longitudinal Employment and Household Dynamics (LEHD), over 75% of employed Shrewsbury residents work outside of Shrewsbury (see Figure 7.2-1). Approximately 32% of those Shrewsbury residents working in other towns commute to Rutland City, with the remainder commuting to a variety of places including Ludlow, the Burlington area, and Woodstock. The largest employer in Shrewsbury is Spring Lake Ranch, one of the oldest half-way houses in the United States.

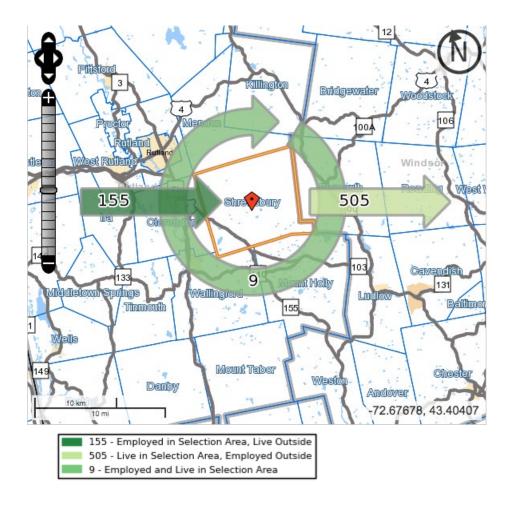


Figure 7.2-1: Shrewsbury Out Flow/In Flow Commuting Patterns

Shrewsbury's unemployment rate has significantly decreased from 6.1% in 2010 to 2.2% in 2018. This trend in unemployment is similar to other towns in the Rutland Labor Market Area.

## **Area Unemployment Rates**

Area Unemployment Rates				
Town	<b>Unemployment Rate</b>			
	2005	2010	Q3/2018*	
Clarendon	3.3%	5.9%	2.5%	
Danby	2.7%	5.8%	2.9%	
Mt. Holly	3.2%	6.2%	1.9%	
Mt. Tabor	7.1%	7.8%	No data	
Rutland City	3.6%	8.7%	3.7%	
Rutland Town	1.7%	2.7%	2.6%	
Shrewsbury	2.1%	6.1%	2.2%	
Tinmouth	3.6%	4.2%	No data	
Wallingford	2.3%	6.4%	2.8%	
West Rutland	3.4%	10.7%	3.3%	
Rutland Labor Market Area	3.7%	7.4%	3.2%	
Vermont State			2.9%	

Source: VT Department of Labor. \* Not Seasonally adjusted, 13 months through Q3 (preliminary).

# 7.3 Economic Future and Opportunities:

The emphasis for Shrewsbury's economic future is in supporting the development of a dynamic and resilient economy characterized by a strong workforce and a solid base of diverse businesses. The type of economic activity that is most suitable is the type that meets the social and economic needs of its residents while preserving the environment's ability to support it. Community based economic approaches encourage local economic activity to ensure that the benefits generated from these activities can be retained in the community.

The Community Forum on the Future of Shrewsbury, held in April of 2012, asked Shrewsbury residents to share their vision for the future. Ideas related to economic activity expressed a desire for small industry and stores, home cottage businesses, green enterprises, and educational facilities. There are a number of small service businesses which already exist in Shrewsbury. There are also a number of various types of building contractors and handyman services. These include home renovation, energy efficiency improvements, heating and plumbing, roofing, carpentry, and new home construction. Property management contractors currently work in Shrewsbury and nearby Towns. This cottage industry is beneficial in that it provides economic opportunity and allows elderly homeowners to continue to stay in their homes with the help to

manage their property and home. On the other hand, a negative aspect to property management businesses thriving is that it indicates a preponderance of vacation homeowners and non-local property owners. In recent years there has been an increase in local vegetable and fruit production, with outlets for these goods through community Supported Agriculture (CSAs), roadside stands, farmers markets, the Shrewsbury Cooperative at Pierce's Store, restaurants spotlighting local foods, and small grocery stores and coops.

#### **POLICY 37: ECONOMIC ACTIVITY**

- 1. Encourage home occupations that do not disrupt neighborhood character.
- 2. Support the development of high-speed internet service to all properties.
- 3. Utilize financial, physical, and technical resources to facilitate economic development, including the creative use and revitalization of suitable existing space for manufacturing and industrial activities, commerce, housing, and the arts.
- 4. Provide assistance and support to Shrewsbury's existing businesses.
- 5. Limit commercial development to the scale and character necessary to protect Shrewsbury's rural and small-town atmosphere.

# 8. TRANSPORTATION PLAN

# 8.1 Infrastructure

The present road system in Shrewsbury consists of 60.5 miles of roads of varying classifications and proprietorship. Settlement patterns have tended to follow existing roadways. As more people move to Shrewsbury, pressure increases to improve roads (to pave, widen, and straighten them) in order to shorten transportation time, improve safety, and to erect signs, lights, and protective barriers to make the Town's roads similar to those found in suburban developments.

According to the 2011 LEHD, 35 % of Shrewsbury's adult working population commutes to Rutland City or Rutland Town. Route 103, the major east-west principal arterial serves Cuttingsville and the Rutland Southern Vermont Regional Airport, and provides a link with the adjacent municipalities of Clarendon, Wallingford, Ludlow, and Mt. Holly, as well as Windsor County and southeastern Vermont. Because of the topographical constraints on Shrewsbury's highway system, prospective growth could occur in strip-like fashion along roadways if a sound transportation plan is not implemented.

Next to education, the construction and maintenance of roads is the largest expense of the Town's funds. While periodic improvements for safety purposes are warranted, modernization of the road system is inconsistent with maintenance of Shrewsbury's basic rural character.

The Town Road Commissioner maintains a mapped culvert inventory, indicating the location and condition of all culverts in the town. This is valuable as input for capital planning and should be continued.

Per Vermont's Clean Water Initiative, Act 64, a Municipal Roads General Permit is now required by the VT Department of Environmental Conservation. Under this Municipal Roads General Permit (DEC MRGP), municipalities must implement a customized, multi-year municipal stormwater management plan. Strategies may include:

- inventorying roadways and identifying connections to surface waters;
- implementing solutions such as stone-lined and U-shaped ditches, turnouts, check dams, road crowning, and grass-lined drainage ditches;
- and upgrading drainage culverts and stabilizing culvert outlets where erosion is present.

The Town Highway Department has been proactive in following these guidelines and thus has received grants and funding for road upgrades and maintenance.

#### **POLICY 38 - Transportation System**

- 1. All modes of transportation shall be taken into account, including pedestrian, bicycle, handicapped, delivery, and emergency vehicles.
- 2. Shrewsbury's network of highways and roads should provide for the safe and efficient movement of through-traffic. Speed limits in Town shall be posted and enforced. To this end, work within the Town highway rights-of-way shall be carefully controlled by the Select Board. There shall be no new public roads or highways. The Town opposes a Route 4 by-pass and a major alteration of Route 103.
- 3. In addition, this Town recognizes the aesthetic value of many of its roads and their recreational use. Correspondingly, Shrewsbury's roadside management practices should put high priority on maintaining the health of roadside vegetation and protecting roadside streams from erosion. Roadside banks should be re-seeded immediately following any earth disturbance. No herbicides shall be used on Shrewsbury's roadsides, nor straight salt on the Town's roads. Invasive plants along roads should be removed and efforts made to avoid the spread of any existing plants.
- 4. The Town shall regulate the use of all classes of Town highways by snowmobiles, all-terrain vehicles, and other motorized off-road vehicles.
- 5. The Town encourages the use of rail for the movement of people and goods.
- 6. The Town shall continue to support the Highway Department to perform maintenance, inventories, and upgrades to achieve stormwater management per the rules/standards of the DEC MRGP.

# **8.2 Functional Classifications**

The highways and rights-of-way comprising the Town's transportation system must serve certain principal functions in accommodating traffic through and within the Town. Classification types and related policies that should guide the Town toward a transportation network which is efficient and economical follow:

# 8.2.1 State and Class 1 Town Highways (Arterial Roads)

State and Class 1 Town Highways are the main arterial state highways used primarily for through traffic. These highways carry a state highway route number. Route 103, totaling 4.24 miles in length is the only state highway in Shrewsbury. Maintenance is handled by the State, whose 2015 traffic counts recorded 5,800 vehicles for annual average daily traffic. While counts have increased historically, approximately 12%-14% over the past decade, the capacity of the road far exceeds the volumes. It is not anticipated that capacity will become an issue.

#### POLICY 39 - State and Class 1 Town Highways

1. State and Class 1 Town Highways shall be maintained in such a way as to not fragment the community. No new public highways shall be constructed.

# 8.2.2 Class 2 Town Highways (Collector Roads)

These paved and hard surfaced roads gather and feed traffic from the local roads to the arterial system or village center. Shrewsbury has 17.95 miles of Class 2 roads, comprised of Cold River Road, Town Hill Road, Lincoln Hill Road, and the Eastham and North Shrewsbury Road. Recent traffic counts (2017) on these roads show 940 vehicles as the average annual daily traffic on Cold River Road, 110 vehicles on Eastham Road, 260 vehicles on Town Hill/Northam Roads, and 400 vehicles (2015) on Lincoln Hill Road (VTRANS Automatic Traffic Recorder Station History 2008-2017).

#### **POLICY 40 - Class 2 Town Highways**

1. These roads shall be maintained to perform their primary function of connecting areas of higher concentration of settlement within the Town

# 8.2.3 Class 3 Town Highways (Minor Roads)

The bulk of remaining roads, totaling 38.3 miles, are Class 3 roads, whose function is to provide access to outlying homesteads and farms. Some of these roads are not plowed in the winter. The Upper Cold River Road through the Brown covered bridge (TH6), Keiffer Road, Old Plymouth Road, Spring Lake Road, Russellville Road, Lottery Road, Adams Road (TH5), and Bailey Road (TH30) are the majority of these roads.

#### **POLICY 41 - Class 3 Town Highways**

1. The primary function of these local access roads should be to provide access from farms, woodlots, and residences to collector or regional highways. These roads shall not be paved.

#### 8.2.4 Class 4 Town Highways

Shrewsbury has 10.2 miles of unmaintained Town rights-of-way that are roads that do not provide for passage of vehicles and in many cases are used as trails for hikers and snowmobiles.

## **POLICY 42 - Class 4 Town Highways**

1. The primary function of non-maintained rights-of-way should be to provide paths for non-commercial recreational activities that do not degrade these highways. Class 4 Town highways should not be upgraded to Class 3 Town highways.

#### 8.3 Scenic Roads

Among the four classifications, there is a special category for State and Town roads of scenic importance. Through a formal notification and hearing process, such roads may be officially designated "scenic roads" to protect their existing historic and rural character. Presently there are no officially designated scenic roads.

## **POLICY 43 - Designated Scenic Roads**

- 1. The following Town highways should be designated as "scenic roads" as recommended by the Shrewsbury Historical Society and the Planning Commission. Town highway numbers are noted after each:
  - a. Bailey Road (Town highway #30)
  - b. Comtois Hill/ Tip Top Road/ Crown Point Road (#28)
  - c. CCC Road (#3: mostly State Forest Road, but 2.5+/- miles Town road)
  - d. Lottery Road (#21)
  - e. Lincoln Hill Road (#4)
  - f. Shunpike (#35)
  - g. Eastham Road (#3)
  - h. Upper Cold River Road (#6)
  - i. Spring Lake Ranch Road (#25)
  - j. Keiffer Road (#45)
  - k. Button Hill Road (#26)
  - I. Coldham Road (#17)
  - m. Mitchell Road (#23)

Any road should be considered for scenic designation when and if residents think the designation would be useful for its preservation.

Special provisions should be provided with regard to setbacks, access driveways, and population density to preserve the scenic character of these roads. Unpaved scenic (or potentially scenic) roads shall not be paved.

#### 8.4 Non- Vehicular Modes

#### 8.4.1 Bicycle/Pedestrian Transportation

Shrewsbury's topography and settlement pattern constrain the potential for bicycle and pedestrian traffic; however, several routes are frequented by bicyclists, namely VT 103,

Cold River Road, North Shrewsbury Road, Lincoln Hill Road, and Town Hill Road. The scenic nature and minimal traffic make these popular bicycle routes.

## POLICY 44 - BICYCLE/PEDESTRIAN TRANSPORATION

1. The Town should work, in cooperation with the State, to improve the roads to accommodate bicycle and pedestrian uses as well as explore options to link to existing and develop new recreational trails.

#### 8.4.2 Rail

The Green Mountain Railroad, part of the Vermont Rail system, runs through Shrewsbury, primarily elevated from the roadway parallel to VT 103. It extends from Rutland through Bellows Falls.

#### 8.4.3 Public Transit

According to 2000 US Census, five households did not have access to a vehicle. There is limited public transportation service on Route 103 in Shrewsbury.

# 8.4.4 Air Transportation

Rutland Southern Vermont Regional Airport, located in Clarendon, is one of ten state-owned and operated public use airports in Vermont. The next nearest airport to the Rutland market is Burlington International, located 67 miles to the north, followed by Albany County Airport in New York State, over 80 miles to the southwest. The airport in Manchester, NH, while farther away, also serves increasing numbers of residents due to the presence of budget airlines. Plans to improve service are under review to increase access to the Rutland Region. The Rutland airport supports one scheduled air carrier, Cape Air, affiliated with Jet Blue. Access to air travel is important in the Rutland Region because it helps attract new business, industry, and tourism to the area, while also helping to retain existing businesses and increasing access to and from the region for long distance travel.

#### **POLICY 45 - PUBLIC TRANSIT**

1. Expansion of the Rutland Southern Vermont Regional Airport shall not have adverse impacts on the Town of Shrewsbury, including, but not limited to, noise levels and light pollution of the night sky.

# 8.5 Relationship to Land Use

The function which each Town Highway serves is directly influenced by the adjacent land use. Such factors as traffic density, speed of travel, road width, sight lines, and curb cuts, as well as the increase in recreational use of roadways, all have great impact on road safety.

## 8.5.1 Strip Development

Strip development, settlement, and commercial growth occurring in a linear path along rights-of-way of roads and highways in rural areas often restricts the functionality of the road in terms of mobility and the safe accessibility to the adjacent land. It obliterates boundaries of villages and rural areas. Where strip development is commercial, it saps the vitality of existing village businesses.

Numerous "curb cuts" providing access to both homes and businesses increase the potential for conflicts between through traffic and those entering and exiting the road. As development proceeds, the value of these roads as transportation corridors is reduced. Traffic is often impeded, and the cost of snow removal and busing for school children may rise dramatically, when secondary roads become settled. Inefficient utilization of land results from development strung along road networks. Access controls, cluster development, frontage, and setback requirements can be effective in controlling this type of growth.

#### **POLICY 46 - Strip Development**

1. Strip development shall be discouraged.

## 8.5.2 Set-Back Requirements

The location of historic buildings along Town roads defines and maintains the desirable rural character of the community. Current set-backs for new construction should be consistent with the existing structures.

### **POLICY 47 - Set-Back Requirements**

1. Building set-backs should be compatible with existing development in the area.

#### 8.5.3 Access Control

The Select Board is empowered by Vermont State Law to impose reasonable conditions on any proposed plan for development of land in order to reduce the number of access points required for that project. At their discretion, the Select Board may make such

regulations as are necessary to protect and promote the safety of the traveling public, but shall in no case deny reasonable ingress and egress to property abutting the roadways, except on limited-access highways.

All applications for curb cuts must be approved by the Select Board.

#### **POLICY 48 - Access Control**

1. Access to Town highways is controlled by the Select Board as provided for in 19 V.S.A. Section 43 and by Town Zoning Bylaws. The State Agency of Transportation shall be encouraged to incorporate Town guidelines in reviewing curb cuts on Route 103.

# 8.5.4 Accessibility

The municipal costs for provision and maintenance of the Town highway system is a substantial share of the Town's annual budget. New roads to land which is not reasonably accessible can significantly increase these costs beyond the revenue generated by new settlement.

Issues to consider include emergency access and the need to control the number, size, and location of vehicular access points to minimize the number of points of access to a public road or improve neighborhood circulation. Each home site should have safe access to a public road, specifically via access drives and roads that meet Town standards. By insuring that access drives and roads serving them are sited along the contours of the land, the result is minimal grading and minimal negative visual impact of the development, allowing for less disturbance and potential problems with road maintenance. Access roads across a slope in excess of 20% may be permitted provided the access road itself does not have a slope in excess of 15% and that adequate erosion control measures are followed.

#### POLICY 49 – Accessibility

1. New roads that are constructed shall be privately maintained and conform to State erosion-control standards and Town specifications.

#### **POLICY 50- Maintenance**

1. Town roads and related infrastructure should be funded adequately to maintain them and the data base of infrastructure kept up to date.

# 9. UTILITY AND FACILITY PLAN

The topics within this section account for the largest expenditures of tax monies. Any substantial alteration to current population trends or type of structures predominant in this Town may adversely affect the cost of Town services.

## 9.1 Education

The Town contributes to the education of its children in the form of property taxes that help fund the Mill River Unified Union School District. The District owns and administers the elementary schools (Shrewsbury Mountain School, Wallingford, Clarendon, and Tinmouth), which educates children from pre-school through grade 6, and high school (Mill River Union High School), which educates children from grade 7 to grade 12.

Students currently have elementary school choice within the District, though transportation is not provided for students attending a school outside their town of residence.

Shrewsbury residents' enrollment at the two schools is presented in the following tables:

# School Population: (Data from Mill River Unified Union School District Annual Reports)

	Shrewsbury Mountain School				
Grade	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Preschool *	16	16	11	15	14
K	7	10	10	7	9
1	7	7	10	9	7
2	12	9	6	9	11
3	7	14	9	7	8
4	8	7	16	10	7
5	6	9	7	14	9
6	9	7	8	7	15
Total Elementary	72	79	77	78	80

Mill River Union High School (Shrewsbury Students)					
Grade	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
7	3	6	7	7	6
8	4	3	8	7	7
9	8	6	7	6	6
10	9	8	6	7	7
11	12	8	10	7	5
12	7	14	7	6	6
Total Mill River	43	45	45	40	37
GRAND TOTALS	115	124	122	118	117

The goal is to continue to provide quality educational opportunities for young people. Shrewsbury's schools are an essential part of the community and seek to provide a safe,

encouraging environment where a life-long love for learning creates self-reliant, successful, well-rounded, and caring members of society.

It is a time of transition for education in Shrewsbury, as the Town now belongs to the Mill River Unified Union School District. This represents a movement towards a "district" style of management vs. an "individual school" model, as the towns in the district, Clarendon, Wallingford, Shrewsbury, and Tinmouth, now consist of a single school board made up of representatives from each town. In addition, all towns in the district will have a single tax rate. These changes have been made in order to make the continued operation of small schools sustainable for the future by sharing expenses and providing students with diverse learning opportunities.

At this time there is also discussion within the district of giving each elementary school in the district a "thematic model." The proposed "thematic model" for Shrewsbury Mountain School is a "Sustainability Academy," which means the SMS curriculum would possess a sustainability, ecology, and environmental science focus while preparing students with the required skills for their high school studies. Shrewsbury residents would have first priority to attend SMS, but they could also choose to attend Wallingford ("Progression-Based Learning"), Clarendon ("Project-Based Learning"), or Tinmouth ("Wilderness/Adventure Academy"), with transportation provided by the district.

Education continues to be a major expenditure for the Town, and despite long-term negative growth in student population at the district level, these costs continue to increase. Shrewsbury is faced with this challenge in light of some sobering statistics: given the general aging of the state's and school district's population, the tax burden will be shared increasingly by fewer people.

Shrewsbury taxpayers must also contribute to district-wide Special Education costs. These State-mandated costs fluctuate, depending on the needs of students in the school system. However, the move to a district-wide approach for Special Education costs, which can be high and difficult to anticipate and budget, ameliorates the unpredictability and financial cost for individual schools through opportunities for innovative programming and sharing resources.

Higher Educational opportunities within a short driving distance include two four-year colleges (St. Joseph's in Rutland; Castleton University in Castleton) and a community college (Community College of Vermont in Rutland). Shrewsbury students attending Mill River Union High School have access to dual enrollment opportunities at these schools, allowing them to gain college credits while completing their senior year. These three local colleges, along with the Stafford Technical Center in Rutland, also offer adult and continuing education in several fields.

Shrewsbury has a strong homeschooling tradition, and homeschooled students have access to a variety of school resources, such as music class, physical education, and extracurricular activities.

The Shrewsbury Library, a non-profit, private corporation, is another important element of the educational and cultural infrastructure in Shrewsbury. It operates primarily on donations of time and money, with a modest contribution from the Town. The Library has

a Board of Trustees and is open during regular hours. Despite its modest funding, the Library continues to offer a broad range of programs for children and adults, such as hosting presentations by local community members and free film showings. Library fundraisers are significant cultural and social events for the community.

The Shrewsbury Historical Society is a nonprofit corporation whose organization's purpose is to discover, acquire, record, preserve, and make available material, and to disseminate information through instruction, or by any other means, which may help to establish or illustrate the history of the Town of Shrewsbury and its progress through the years.

The Shrewsbury Outing Club offers swimming lessons in the summer.

Many other types of education are available in Shrewsbury by means of group and/or private lessons offered by Town residents and private organizations. Lessons in music, crafts, computer skills, yoga, and horseback riding are some of the many educational opportunities that are available on a year-round basis. A nonprofit corporation dedicated to "encouraging traditional and innovative ways of farming organically in Vermont" offers a wide variety of programming to local schools and the public, including farm tours, workshops, guest speakers, storytelling, and other forms of experiential education. Therapeutic horsemanship is offered by certified instructors at a private farm in Town.

#### **POLICY 51- EDUCATION**

- 1. Actively support the continued operation of Shrewsbury Mountain School and Mill River Union High School.
- 2. Advocate for Shrewsbury Mountain School and students via Shrewsbury's two elected school board representatives.
- 3. Continue to support the Shrewsbury Library, the Shrewsbury Historical Society and the Shrewsbury Outing Club.

#### 9.2 Child Care

The availability of child care is a factor in Shrewsbury's affordability. Parents of young children need to have access to safe and affordable child care. There is currently one licensed day care in Shrewsbury that operates out of Shrewsbury Mountain School.

The 2010 census indicated that there were 48 children under the age of 5 living in Shrewsbury. It is expected that many parents likely choose to have their children near their places of work, thus potentially reducing the need for child care in Shrewsbury. Parents and/or child care providers should be asked to provide input regarding the local need for additional child care facilities.

#### **POLICY 52- Child Care**

- 1. Permit the use of single family homes in Shrewsbury for small-scale family child care facilities.
- 2. Encourage maximum flexibility for parents to have access to quality child care.

# 9.3 Waste Disposal

Sewage and solid wastes can cause serious health and environmental problems if not treated and disposed of properly. It is essential for the Town to require and, where appropriate, to provide adequate and safe disposal systems for these waste products.

For many years, Shrewsbury was a member of the Joint Municipal Survey Committee/Solid Waste Alternative Committee (JMSC/SWAC), a multi-town cooperative effort to comply with State solid waste management requirements. The Joint Municipal Survey Committee was the first step toward either the formation of a union municipal district or the adoption of a contract between interested towns. In 2002 Shrewsbury voted to adopt an Interlocal Contract with the towns of Benson, Chittenden, Fair Haven, Middletown Springs, Pawlet, Rutland Town, Sudbury, Tinmouth, and West Haven as the way to help address the solid waste needs of these communities. The contracting towns are known as the Solid Waste Alliance Communities (SWAC).

SWAC contracts with a part-time administrator to represent the member towns at state-wide solid waste and hazardous waste meetings, disseminate information to the towns, obtain grants for the benefit of the SWAC towns, coordinate recycling pickups, oversee shared equipment, and help maintain a Solid Waste Implementation Plan (required by State regulation) covering all SWAC towns.

SWAC arranges household hazardous waste collections that are available to residents four days per year with drop-off service available through an agreement with the Rutland County Solid Waste Management District throughout the year. The cost of these collections is shared by the SWAC towns.

Shrewsbury operates a solid waste transfer station, open for use by residents twice a week. In order to use the facility, a sticker is required on the resident's vehicle. The Town owns a glass crusher, creating a material useful for certain kinds of fill. The Town also owns a baler that generates revenue.

Reducing the quantity of waste materials is essential to controlling the cost of solid waste disposal. Recycling and reusing materials keeps them from the landfill as does composting organic matter.

The Town should work with the State, SWAC, and private organizations to educate Townspeople on the importance of reduction and recycling of waste materials and actions to achieve the Town's goals.

The Town has a solid waste ordinance. The Town recognizes that, after doing all possible to reduce the waste generated, there will still be waste that requires land disposal. Any waste processing or disposal facility within Shrewsbury must be operated with proven technology under the strictest review and with extensive recycling of any reusable materials as an integral component.

Any waste site developed within the Town of Shrewsbury shall be designed and operated in a manner that will provide protection to nearby landowners as well as incorporating the best available technology to prevent damage to the environment. The site must be large enough to adequately protect adjacent landowners from offensive activities. Materials must be separated before disposal or burial.

## **POLICY 53 -Waste Disposal**

- 1. Sewage or other wastes (including garbage, solids, industrial by-products, and discarded materials of any sort) shall be disposed of in accordance with the applicable State of Vermont statutes and regulations.
- 2. The Town should investigate and inform residents of ways in which toxic household wastes can be safely stored and safely disposed of.
- 3. No radioactive waste may be stored, long- or short-term, in Shrewsbury. Transportation of radioactive waste through Shrewsbury is permitted only when required by State authorities.
- 4. All wastes, including hazardous wastes, shall be disposed of so as not to reach state waters or constitute an environmental hazard at any time. Such disposal shall take place only at state-certified facilities or disposal sites. Wastes meeting state criteria as hazardous shall be disposed of according to state requirements. In addition to meeting state requirements, solid wastes, including discarded materials, shall be disposed of so as not to be visible at any time from off-site. Disposal or storage of wastes and discarded materials of any sort in the Town of Shrewsbury shall meet all applicable health, safety, and aesthetic criteria. All sewage disposal methods shall be addressed where possible in the Town's sewage disposal regulation.
- 5. Owners and operators of any waste facility shall work cooperatively with the Town of Shrewsbury and with any other municipality which may be affected by the operation of such a facility to plan the operation and the use of the land after reclamation of the site.
- 6. Any solid waste facility must comply with all State and Federal regulations.
- 7. Owners and operators of any privately owned solid waste facility proposed for the Town shall execute a host town agreement providing financial and legal assurances to the Town prior to applying for any permits other than preliminary State solid waste certification.
- 8. The Town will continue to operate the Town Transfer Station, upgrading its facilities as funding permits. Town residents are urged to use the Transfer Station and to recycle as many materials as possible. Town residents are also encouraged to reduce waste and to reuse materials whenever possible.

- 9. Conditionally exempt generators of small quantities of hazardous wastes (CESQG) shall register with the Town Clerk and the Agency of Natural Resources.
- 10. The Town should keep records of the amounts of solid waste disposed of and recycled at the municipal transfer station, including metal waste.

# 9.4 Telecommunications Facilities

Telecommunication towers and related infrastructure (including cable or telephone services) require careful consideration. These structures tend to be located in highly visible locations on mountaintops and ridgelines, and the need for additional facilities is projected to increase dramatically in the next five to ten years. While the federal Telecommunications Act of 1996 placed certain limitations over municipal control of these structures, in order to protect the Town's historic character, rural nature and aesthetic beauty, Shrewsbury has adopted an Ordinance for Towers & Telecommunications Facilities.

Toward that end, this ordinance incorporates appropriate guidelines and regulations governing at least the following areas: aesthetics, integrity of residential zones (that is, intrusion of commercial structures into residential areas), ridgeline protection, preferred locations (whether general or specific), co-location or clustering of tower facilities, and protection of wildlife—particularly birds.

Many towns now realize the potential for adverse impacts caused by the placement of towers and related infrastructure and seek the cooperation of all parties in resolving these concerns. The Town of Shrewsbury is concerned about the aesthetic and environmental impacts of tower facilities.

When planning new infrastructure or upgrades to existing systems, special consideration shall be given to any primary or secondary impacts that would reduce resource values (including, but not limited to, aesthetics, agricultural land, timber resources, natural areas, wildlife habitat, and historic sites). In addition, when a new facility is planned, there must be clear evidence that the proposed location is necessary based upon economic considerations, potential impacts on resource values, and the resulting public benefits. In all cases, appropriate and suitable techniques shall be used to minimize or prevent any adverse impacts from the placement of towers and related infrastructure.

#### **POLICY 54 - Telecommunication Facilities**

1. All such facilities shall be located in appropriate areas, respecting the integrity of residential areas, aesthetic concerns, and natural resource issues. Through an ordinance, the Town may specify reasonable areas where these facilities may be located. This is important on a macro scale (general areas in Town) as well as a micro scale (specific desirable placement or location; for example, below ridgelines, camouflaged, tucked into groves of trees, and the like). As noted elsewhere in this Plan, the protection of ridgelines and scenic beauty is very important to the Town of Shrewsbury.

- 2. Wherever possible, facilities shall be co-located at or on existing structures or facilities, unless the Development Review Board determines that separate facilities will create less visual and aesthetic impact.
- 3. Towers and related facilities shall only be as tall as absolutely necessary. Where towers are located within tree lines, they should be made to be extendable, so they can grow with the trees, and remain the minimum height needed above the treetops.
- 4. Unless required by the FAA, towers shall not be illuminated. Where required, lights shall be shielded in order to minimize aesthetic impacts, and so that light is cast only where needed. Towers requiring illumination shall only be allowed where not visible to any Town or neighboring town residents.
- 5. Electric or transmission lines shall be installed so as to minimize aesthetic and ecological impacts. For example: clear-cut swaths, created for power lines or access roads which go straight up the mountainside, often create far more adverse impacts than the towers they serve, and are not acceptable.
- 6. Any permits granted for these facilities shall be for a limited time period. This will allow for periodic review and new permit conditions reflecting advances in knowledge, experience, and technology. The Town encourages the downsizing of equipment as technology advances and its removal when no longer used or needed. These requirements can minimize aesthetic intrusion, while maximizing the potential to serve a greater number of users in the same physical area. A bond shall be required to ensure that funds are available to accomplish these purposes.
- 7. Regularly review and update the Town's Telecommunications Ordinance.

#### 9.5 Fire Protection

The Shrewsbury Volunteer Fire Department, Inc., is a private, non-profit corporation organized in March 1952, by request of the Select Board, to provide fire protection to the community. The department's primary purpose is the saving of life. Its secondary purpose is the saving and protection of property. All equipment is purchased and training conducted in accordance with these purposes.

Every year the Shrewsbury Volunteer Fire Department spends numerous training hours learning the operations of new equipment, pumping hydrants to ensure proper operations, CPR/AED recertification, HAZMAT awareness, DHart helicopter training, and fire scene communication.

Fire protection is supplemented by the department's membership in the Rutland County Mutual Aid Association, which is an organization of 20 fire departments within the county that agree to respond to any request for assistance. The workforce is all volunteer and includes about 18 firefighters and an auxiliary. These volunteers give many hours not just to fire fighting and training, but also to maintenance of stations and vehicles and fundraising. In 2017, 47% (\$16,487) of its annual operating budget (\$35,000) was raised by the SVFD, with the Town contributing the remainder.

The Town voted in March of 1995 to establish an equipment reserve fund to upgrade major equipment. The fire trucks are replaced as needed.

Long and steep driveways, cul-de-sacs, and long distance from reliable all-season water sources all impede the Fire Department's ability to provide fire protection to all Town residences.

## **Major Equipment and Its Location:**

## Company 1, Cuttingsville Station, Town Hill Road, Cuttingsville:

- 1. 2000 Freightliner 1250 GPM Pumper
- 2. 1992 Ford 1500 gal. Tanker, 500 GPM portable pump

#### Company 2, Northam, Cold River Road, Northam Village:

- 1. 2007 Pierce 1250 GPM Pumper
- 2. 2003 International 1250 gal. Tanker, 500 GPM portable pump

#### **POLICY 55 - Fire Protection**

- 1. All future development within the Town should be in accord with the capabilities of this department to service the development. If development includes a pond, consideration should be given to installation of a dry hydrant.
- 2. Facilities and effective equipment for fire protection shall be provided within the financial capabilities of the fire department and Town.
- 3. The Town encourages the continuation of the sinking fund.
- 4. The Town encourages residents to join the Volunteer Fire Department.

#### 9.6 Police Protection

The Town is served by a first and second constable elected on Town Meeting Day.

In addition, Shrewsbury is covered to a limited extent by the Vermont State Police Troop "C" barracks located in Rutland Town and the Rutland County Sheriff's department. At times, the Town contracts for special services through the Rutland County Sheriff's Department.

#### **POLICY 56 - Police Protection**

1. With any significant increase in population or development, consideration should be given to ways in which police protection can be made available on a more comprehensive basis.

2. Consideration should be given to the formation of an inter-town police force between Shrewsbury and adjoining communities.

# 9.7 Emergency Medical Services

Rutland Regional Ambulance Service, Inc. (RAS), and the Mount Holly Volunteer Rescue Squad both provide emergency medical response. The Regional Ambulance Service receives funds from the Town at a per capita rate of \$4.00.

# **POLICY 57 - Emergency Medical Services**

1. Encourage support of these services.

#### 9.8 Recreation

As Shrewsbury grows in population and diversity of activities, it is important to look ahead and anticipate the impact of these changes. It is essential that the Planning Commission periodically examine and define objectives for recreational enhancement. In the course of this activity, the Planning Commission must consider the availability of property and services within the Township for conversion to, or for continued and improved, recreational purposes. Some recreational activities may require well-coordinated, cooperative endeavors among voters, taxpayers, specific property owners, and Town and State officials. State regulations require that snowmobilers and ATV operators obtain written landowner permission before riding on private land.

The network of trails and old woods roads in Town offers access to important scenic and recreational resources. The network includes a number of private and public trails for hiking, horseback riding, cross-country skiing, hunting, and snowmobiling. They cover a wide variety of terrain and elevation and, to those with patience, they provide an opportunity to observe the mysteries and beauty of the animal and plant world in a pristine natural setting. However, the growing popularity of Shrewsbury trail use by commercial recreational outfitters is of great concern. Changes in traffic, safety, erosion, noise, and air pollution are important considerations that the Town must assess in light of preservation of these.

#### **POLICY 58 – Recreation**

- 1. Land use development in Shrewsbury should occur so as not to significantly diminish the value and availability of non-commercial recreational activities to the people of Shrewsbury.
- 2. Recreational use of trails, old roads, seasonal roads, and wilderness areas should be used in a manner that:

- a) Maximizes the opportunity for various kinds of users to experience their own particular joys;
- b) Minimizes the situations in which one kind of use impedes the enjoyment anticipated from another kind, such as the speed, noise, and exhaust fumes from motorized recreational vehicles which may detract from the enjoyment of quieter recreational activities:
- c) Preserves the environment, which is the key source of enjoyment for everyone;
- d) Encourages cooperation with State and Federal agencies and with appropriate recreational groups (e.g. VAST, Green Mountain Club, Catamount Trail Association, Shrewsbury Outing Club) in the best interests of Shrewsbury.

Separate and combined trail systems for snowmobilers and cross-country skiers may be established in cooperation with Town officials and the Department of Forests, Parks and Recreation. Other trails for various uses may be designated in cooperation with landowners, public agencies, and trail users.

The Shrewsbury Peak Trail shall be protected by an undisturbed corridor of at least 500 feet. The Town may designate the protection of other trails as the need arises. There shall be no new shelter or parking areas without the approval of the Development Review Board and the Select Board.

The Town will take appropriate action with respect to commercial recreation activities (e.g. mountain biking, snowmobiling, ATVs, paintball, etc.) to address such issues as noise, safety, pollution, damage to the landscape, and impact on other recreational uses. Guidelines and regulations adopted or under development by other groups such as VAST and the State Department of Forests, Parks, and Recreation may suffice but, if not, Town ordinances will be provided.

#### 9.9 Cemeteries

There are 12 cemeteries in Shrewsbury. They are:

- 1. Bullard Cemetery
- 2. Center Cemetery\*
- 3. Colburn-Tabor Cemetery
- 4. Durham Cemetery
- 5. Finney Cemetery
- 6. Haley Cemetery
- 7. Laurel Glen Cemetery\*
- 8. Northam Cemetery\*
- 9. Plumley-Page Cemetery
- 10. Shippee Family Cemetery
- 11. Sirjane Cemetery
- 12. Woodward-Wilder Cemetery
- \*Cemeteries with a cemetery association

**POLICY 59 – Cemeteries** 

- 1. The Town's Board of Cemetery Commissioners should cooperate with the private landowners for the upkeep of those cemeteries in Town that do not have their own cemetery association.
- 2. A list of criteria should be developed by the Cemetery Commission for enlarging an existing cemetery or for establishing a new cemetery.

# 9.10 Town-Owned Property and Equipment

The Town owns land on Jockey Hill, the Mandigo Meadow to the west off the CCC Road, Lots 189 and 190 located in Coolidge State Forest, the area adjacent to the Brown Covered Bridge, and a lot in Shrewsbury Center. The Town also owns the transfer station in Northam and the Town garages in Northam and Shrewsbury Center, the Town Office, and the Meeting House.

Inventory of Town Road Equipment:				
2017 International 7600 with plow and sander	2002 International 2574 with plow and sander			
2015 Caterpillar 12 M 3 Grader	2000 Caterpillar 928G Loader			
2015 International 7600 with plow and sander	1996 Caterpillar 416B Backhoe			
2014 Ford F-550 with plow and sander	1995 Woodchuck Brush Chipper			
2010 International 7600 with plow and sander	Chloride tank with spray bar			
2009 John Deere 5065E tractor mower broom	Miscellaneous Tools			
2005 Caterpillar 307C Excavator with trailer				

# 9.11 Cultural Assets

Townspeople should be encouraged to support regional cultural activities. Citizens of Shrewsbury receive significant benefit when cultural programs are presented to either the school system or the greater community.

Enriching the creative lives of Shrewsbury inhabitants are a variety of organizations, individuals, and facilities which may be called Cultural Assets. The organizations include the Shrewsbury Historical Society, the Shrewsbury Library, the Shrewsbury Community Church, the Shrewsbury Chamber Music Society, and the Shrewsbury Players.

Facilities housing some of these organizations include the Cuttingsville Church (deeded to the Historical Society as a museum), the Shrewbury Library (formerly the Cuttingsville Elementary School), the Shrewsbury Meeting House (which houses a meeting and activity room as well as a place of worship), the Shrewsbury Elementary School, and the Pierce Playground which are available for both education and recreation.

These facilities are used for a variety of concerts, lectures, plays, folk dances, and children's programs. Individual homes of some residents provide studios for graphic artists, potters, photographers, poets, dancers, cabinetmakers, and both classical and folk musicians. The creative and artistic cultural traditions are strong in Shrewsbury and enrich the creative lives of the citizens.

#### POLICY 60 – Cultural Assets

- 1. Encourage the continuation and organization of Town groups and facilities that support and stimulate creative activity.
- 2. Recognize the importance of creative activity for individual development and fulfillment and the enhancement of community appreciation and morale.
- 3. Support cultural organizations and individuals and appreciate their contribution to the dynamic quality of life in Shrewsbury.

#### 9.12 Historic Sites

Chartered in 1761 following the conclusion of the French and Indian Wars, Shrewsbury was settled first by New Englanders from Massachusetts and Connecticut seeking land and freedom from local taxes. Active settlement began following the Revolutionary War in 1778. The new settlers cleared land, cleared stones from the planted fields, built stonewalls to mark property boundaries, and dug cellar holes lined with massive glacial boulders and cut stone. The many streams provided power for saw mills and an active lumber industry. Cheese factories bought the local milk after the sheep boom waned in the 1860's.

Today, stone walls still exist—some surrounding open meadows, some leading through second growth forest that used to be meadows and pastures. The back roads lead to cellar holes reflecting Shrewsbury's population of 1,289 in 1830.

In addition Shrewsbury contains beautiful homes such as those built by Moses Lefevre (The Herb Farm, the Ladd House, and the Bailey House are examples), and three churches, the earliest in Shrewsbury Center built in 1804. Pierce's Store in Northam, now under the trusteeship of the Vermont Preservation Trust, is a classic example of a Vermont country store, and Brown Covered Bridge over Cold River is carefully maintained and still in use. The Aldrich Cheese factory in Northam is now a private home. The Aldrich Farm house is the former Shrewsbury Parsonage and now a private home.

In Cuttingsville, handsome brick homes reflect a variety of architectural styles, and the Bowman Mansion is a classic Victorian statement of the financial success of John Bowman, the tannery baron. Laurel Glen, the Cuttingsville cemetery, contains Bowman's white marble mausoleum where sculpted life-sized, he visits his family at the mausoleum door holding his silk hat, and wreath in one hand, and keys to the door in the other, next to his heart.

Shrewsbury offers a broad variety of historic sites, an active Historical Society, and an interesting Historical Museum located in a former Cuttingsville church building next to the Laurel Glen Cemetery.

# 9.13 Emergency Management

Shrewsbury is subject to a variety of hazards, both natural and man-made. Floods, lightning and thunderstorms, ice storms, and heavy snows can wash out roads, cause fires and floods, cause serious power outages, isolate sections of the Town, and inflict personal injury. The heavy truck traffic on Route 103 in Cuttingsville and the increasing use of the railroad subject the Town to a variety of hazards, like the spill of fuel and hazardous chemicals. To effectively mitigate these serious hazards and protect townspeople, the Town has implemented a multi-faceted Emergency Management Program.

The Emergency Management Program coordinates the efforts of the Town Clerk, the Select Board, the Fire Department, the Road Commissioner and the road crew, the Shelter Coordinator, a medical team, and the Fire Department Auxiliary which operates the shelters. A Human Resources Team of volunteers works to ensure that Shrewsbury citizens, particularly the elderly and those needing assistance, are equipped to meet particular emergencies.

The program functions under the direction of the Select Board, who appoints an Executive Coordinator who heads the Emergency Management Team. The Emergency Management Team meets monthly to discuss communications, to review and pre-plan strategies to deal with hazards, to plan training sessions, and to consider any new business, such as mutual aid and responsibilities both to Shrewsbury and neighboring communities.

In 2012, Shrewsbury emergency management received a grant from the Department of Homeland Security to install a radio antenna on the top of Kinsman's Hill to enhance communication among all the first responders in Shrewsbury and surrounding areas.

The Town has a Pre-Disaster Mitigation Plan which is used to plan for and minimize the impact of expected, but unpredictable, natural and human-caused events. Shrewsbury also has a current Rapid Response Plan and an Emergency Management Ordinance which establishes a local organization (Office of Emergency Management) that ensures the complete and efficient utilization of all the Town's facilities to address various emergency situations.

#### **POLICY 61-Emergency Management**

- 1. Continue to develop and train an effective Emergency Management Team and volunteer program.
- 2. Anticipate emergency situations and pre-plan responses to them.
- 4. Hold training drills to effectively mitigate potential hazards.
- 3. Carefully assess responses to drills and actual situations and work to improve responses.
- 5. Identify and apply to funding sources for essential equipment, such as radios and generators.
- 6. Educate Shrewsbury citizens about Emergency Management and potential hazards through articles in the *Times of Shrewsbury* and at local and regional workshops.
- 7. Keep Emergency Response plans up to date.
- 8. Actively participate in multi-town emergency preparedness activities while striving to be self-sufficient wherever possible.
- 9. Promote emergency safety among households in Shrewsbury.

#### 9.14 Elder Care

As Shrewsbury continues to follow the state-wide trend for an increasingly older population, the need arises to provide housing and services to accommodate the senior members of Town. A number of Shrewsbury's seniors have been residents since birth and many have chosen to move here decades ago to enjoy the natural beauty and true sense of community the area has to offer. Even as they age, many desire to stay in Shrewsbury and continue participating in local organizations and Town functions, thus remaining a vital part of this community.

**POLICY 62- Elder Care** 

- 1. Support local organizations such as NeighborWorks and Living In Place which provide assistance to senior and challenged members of the community so they may continue living in their own homes for as long as possible. Living In Place, a grass roots effort begun in Shrewsbury, is working to provide assistance with transportation, meals, medical equipment needs and home repairs.
- 2. If the need and opportunity arise to create an organized senior living facility in the community, the Town shall support such a plan while taking into consideration the inherent limitations of infrastructure which may exist.

#### 10. ENERGY

Energy planning has come to the forefront in Vermont in the 21st century. In addition to energy generation, distribution, and use, energy planning and policy are tied to economic development, land use, transportation, community, and Vermont's landscape. Vermont State statute (24 V.S.A. section 4382) requires that municipal plans include an energy plan including, "an analysis of energy resources, needs, scarcities, costs and problems within the municipality, (and) a statement of policy on the conservation of energy ..." Recently (in 2016), Vermont passed Act 174 - the Energy Development Improvement Act, "to make efficient use of energy, provide for the development of renewable energy resources, and reduce emissions of greenhouse gases. " State and Regional energy planning has ensued. This section addresses these issues and includes policy on the development of renewable energy, which has seen tremendous growth in Vermont.

# 10.1 Use of Energy

Energy consumption and production is an important topic across the state and country. In Shrewsbury, overall energy use is relatively low due to the Town's low population and few businesses and limited Town facilities. The primary sources of energy in Shrewsbury currently are wood, passive solar, oil, and propane for heating; Green Mountain Power utility for electricity; and gasoline and diesel for transportation. The 2015 total annual electric energy use in Shrewsbury was 4.7 GWh. The average Shrewsbury home used 6,834 KWh in 2015 (2015 data from Rutland Regional Energy Plan).

A number of homes in Town use household-scale windmills, active solar panels, or passive solar design to provide electricity or hot water, or to reduce heating costs. As of 2018, there are 42 solar sites in Shrewsbury, of which 6 are ground-mounted PV, 33 are roof-mounted, and 2 produce hot water. Together they produce 312,968 kWh of electricity per year (data from Vermont Energy Dashboard).

Transportation is the leading source of energy use in the Rutland Region and throughout the State. In 2017, it accounted for 36.8 percent of all energy consumed in the State and 44.7% of carbon dioxide emissions.

# 10.2 Energy Efficiency and Conservation

The energy consumption of a household is its major environmental impact. This should be limited through both energy conservation methods and transition to efficient

appliances and lighting to the greatest extent practical. Weatherization has been effectively applied to homes and commercial buildings both old and new, resulting in significant savings of heating fuel. Local organizations and specialized local contractors are available in the Rutland region to assist Shrewsbury property owners with weatherization and other efficiency programs to reduce their overall energy use in existing homes and new construction. The Town and residents can cooperate and engage with energy conservation installation and incentive programs such as Neighborworks of Western Vermont and Efficiency Vermont to make energy efficiency improvements and become informed about the services and financial assistance that can be offered by such programs available to the Town and residents.

As of 2015, the Vermont Residential Energy Code requires that residential construction meet minimum standards for energy-efficient building components and construction practices. The builder is required to self-certify compliance by filing a Vermont Residential Building Energy Standards Certificate with the State and the Shrewsbury Town clerk.

# 10.3 Energy Production Planning

In 2011, the State of Vermont adopted a comprehensive energy plan (CEP) for Vermont to meet 90% of its total energy needs through renewable energy sources by 2050. The CEP was updated in 2016 although the goals were not altered. The plan, developed by the Public Utility Commission (PUC), called for reducing energy consumption per capita, targets for meeting the remaining energy need from renewables, and renewable sector goals.

There is a growing recognition of the importance of sustainable and environmentally sound energy production. Shrewsbury can and should do its part in the global transition from fossil fuels and nuclear power to alternatives such as clean wood burning, small-scale hydro, and solar and wind power generation compatible with the environmental priorities in this plan.

The State of Vermont and the Town of Shrewsbury differentiate between small-scale and commercial-scale solar energy systems. A small-scale system is designed to generate energy for use on the lot where it is located, whether it is a residence, business, or farm.

Commercial-scale systems primarily generate energy to supply the utility grid to be sold to the general public These commercial solar developments may convey an image of industrial development inconsistent with Shrewsbury's agricultural and rural residential community if not sited carefully.

Community-scale systems are typically of a small-scale size; these systems are shared by numerous households, and may include municipal use and even town-wide participation.

With renewable sources, such as sun and wind power already in use, towns across Vermont are crafting guidelines to regulate the development of commercial and residential energy system installations. Regulations are necessary to protect the interests of the Town of Shrewsbury, its residents, its farmland, and its businesses.

Recent Vermont State legislation, Act 174, establishes municipal and regional energy planning standards. These standards, if developed and adopted by municipalities, allow Town Plans to carry greater weight in the state process for siting renewable energy generation. An energy plan incorporating the required regional energy planning standards is currently referred to as an "enhanced energy plan."

# 10.4 Residential Scale Renewable Energy Production:

Residential scale renewable energy systems can produce electricity, hot water, and heat. Roof and ground-mounted solar panels, small wind turbines, and small hydro generation units, and geothermal systems, in coordination with passive solar siting of homes and wood burning heat sources can provide less dependence on fossil fuel generated electricity and fuel to heat homes and water. Residential scale renewable systems in Vermont can be off-grid for those landowners who choose not to connect to the electrical grid, or can be connected into the electrical system via a net metering process administered by the Vermont Public Utility Commission (PUC).

# 10.5 Commercial Scale Renewable Energy Production:

Commercial scale electricity production requires proximity and access to three-phase electrical distribution power lines. Typically, a developer of a commercial energy project is responsible for the project's total cost, including the build-out of the power line access to where it can be utilized. While three-phase power lines have not been located throughout Shrewsbury in the past, recent distribution line upgrades and proposals (2017-2018) have included a second feeder as well as the infrastructure (poles, crossarms, and triplex supports) for three-phase power to more easily be built throughout the Town.

It will be important for Shrewsbury residents to be engaged in any proposals for commercial scale wind and/or solar projects in the Town and region, and determine how to balance the policies of this plan with the potential for renewable energy production. Project development review will need to include not only the energy production sites, but the access roadway and the electrical power lines.

Commercial solar, wind, hydro, methane, and biomass energy facilities are not a permitted or a conditional use under Shrewsbury Zoning Regulations, so only facilities licensed by the State Public Utility Commission can be installed.

#### 10.5.1 Solar:

Commercial/industrial solar farms are typically built on open landscapes. The Town Plan recognizes the value of the Vermont current use program, preservation of agricultural soils, and other open spaces in the landscape (see mapped resources in Natural Resource Map 1 of 2 and Meadow Lands Zoning Overlay Map). Open spaces, fields, and prime soils that have agricultural and aesthetic potential should be evaluated for conformance with the Town Plan prior to the siting of large-scale solar projects. Solar development issues include aesthetics and land use depending on the size of the system. Solar panels are typically mounted on the ground with posts or some form of

ground mounting structure which can have a visual impact to neighboring properties if not properly sited, or can impact open space and agricultural lands if the panels are not sited or clustered to maximize the open space.

New commercial solar facilities and transmission facilities should be sited in locations that reinforce the community's traditional and planned patterns of development, which is of a landscape pattern that includes large amounts of working farm and forest land and residential development in villages and hamlets. The following siting considerations will need to be evaluated for the development of larger, utility-scale commercial solar electricity generation and transmission facilities to be consistent with Shrewsbury's pattern of development:

- Sites where existing hedgerows, hills, or other topographical features
  naturally screen the proposed array from view by neighbors and by the public on
  main highways.
- Sites where facilities can be clustered at the edge of timber stands and in previously disturbed areas, such as gravel pits, closed landfills, or former quarries. Clear-cutting forest areas for commercial solar arrays is inconsistent with the nature of the Town of Shrewsbury.
- Solar facilities should be located so as to retain use of prime agricultural soils.
- State and Town setbacks must be adhered to.

Because of their distinctive, natural, historic or scenic value, and special significance to the community, commercial solar facility development shall be excluded from (prohibited within), or shall not be supported by the Town of Shrewsbury in the following locations:

- Aquatic and upland ecosystems, critical animal habitats and corridors, and wild areas.
- Elevations above 2,000 feet.
- Wetlands (see Fragile Areas map), Class 1,2 or 3.
- Water resources areas, shoreline, streambanks as well as aquifer recharge areas.
- Floodways and fluvial erosion hazard areas.
- Unique geologic areas.
- Agricultural lands/Woodlands: A location that requires fragmentation of Shrewsbury's working landscape, including undeveloped forestland, open farmland in operation, and primary agricultural soils. Solar array development should not compromise the future agricultural value of the site. Clear-cutting forest areas for commercial solar arrays is wholly inconsistent with the nature of the Town of Shrewsbury, and is prohibited.
- Highest priority interior forest blocks in Shrewsbury as defined by the State of Vermont.
- Rare, threatened, or endangered species habitat or communities as mapped or identified through site investigation, and core habitat areas, migratory routes and travel corridors similarly identified.
- Land that is subject to a conservation easement, whether or not the easement permits it or the holders of the development rights consent to it.
- Lands in the Use Value Appraisal program (also known as "Current Use") must be removed from Current Use taxation before beginning construction of the transmission lines on or off site, or the arrays themselves.

- Location where a site cannot be screened from the view of neighbors and thus prohibits them from the peaceful enjoyment of their property.
- A site that causes significant adverse impacts to historical or cultural resources in the Town.

#### 10.5.2 Wind:

The debate over large-scale wind turbines has been engaged in several communities in Vermont. One utility-scale wind farm, in Searsburg, has been operational for several years and was recently expanded. Several other large scale wind farms have recently been constructed and are operating in northern Vermont. However, these utility scale wind farms have not gone without controversy over their environmental and aesthetic impact and many residents in surrounding communities are reporting environmental and aesthetic impacts including adverse noise emissions as described by the local residents within several miles of the wind farm.

Recently identified projects and applications which were put before the Public Utility Commission for large scale wind farms in nearby towns of Rutland County were vehemently rejected by the Towns affected and the applicants subsequently withdrew their applications. The current political climate is such that new large scale wind turbines are not considered acceptable on mountaintops and ridgelines in Vermont.

Many of the recent wind farm projects have been built on ridgelines above an elevation of 2,000 feet, which would not be permitted by the Shrewsbury Town Plan. Wind farm development issues include scenic and aesthetic issues, impacts to the environment (both at high elevations and in wildlife corridors), impacts to avian and bat populations, and noise impacts to residential areas within a few miles of the site. Another potential impact to both nearby residents and environments is the noise and the adverse flicker produced by the rotating blades.

## 10.5.3 **Hydro**:

While small-scale hydro was an energy source in the past, it is unlikely to be developed as a significant energy source again. There are, however, some locations in the Town of Shrewsbury which could potentially be used to develop small residential-scale hydro power. The State of Vermont has full oversight in protecting water resources in order to maintain and protect the environmental and biological integrity of Vermont's streams, brooks, and rivers.

#### **10.5.4** Biomass:

Commercial/Industrial biomass plants rely on significant quantities of local timber and water resources as well as large volumes of heavy truck traffic. Any removal of biomass for energy from Town woodlands and public forest land must require retention of adequate biomass residue from timber and sufficient woody debris to ensure long-term soil health and forest ecosystem sustainability.

# 10.5.6 Methane (Cow Power):

Methane generating facilities rely on farm waste or other "organic" waste that have the ability to produce heat in an anaerobic digester, which in turn can produce biogas to turn an electric generator to produce electricity. There are several methane production facilities throughout Vermont, and Shrewsbury residents should be engaged and informed of those proposals in the Town and region to determine how to balance the policies of this plan with the potential for methane to electricity generation.

# 10.6 Energy Transmission and Distribution

A transmission line is the set of conductors (wires) and supporting towers that carry electric power from a generation source to a substation. They are typically at a higher voltage than distribution lines. Shrewsbury currently has two major electrical power transmission corridors. These have environmental and aesthetic impacts on the Town, such as electromagnetic radiation, noise, wildlife corridor interruption, and the visual impact of clear-cut swaths across ridgelines and hillsides.

An electric distribution line is the local utility conductors and poles that carry electric power from the substation to the utilization points in the area such as residences, farms and businesses. They typically are constructed today along transportation corridors though originally (1940's-1950's) were run cross-country from farm to farm. The electric distribution poles often also serve to support communications utilities. This Town Plan will refer to electric and/or communications distribution lines as "utility lines."

Utility lines inappropriately sited along roadsides also have an aesthetic impact. The tree-trimming required to maintain them can significantly change the character of a road where branches arch overhead. The web of overhead lines in village centers limits the size of trees that can grow there. On-site energy production can potentially offset the impact of power line installation and maintenance tree trimming. The Town encourages the burying of utility lines when appropriate.

#### POLICY 63 - Energy Efficiency, Conservation, Production and Transmission

- 1. Encourage household energy conservation through the use of more efficient, cleaner-burning wood stoves and boilers, as well as better insulation and weatherization methods, and the use of passive-solar construction in new homes, high-efficiency appliances and heating systems, and energy-efficient lighting.
- 2. Encourage household energy production through passive and active solar generating and co-generating opportunities, as well as small-scale hydroelectric and wind-power electric generation technologies where an environmental and biological impact study performed by qualified agencies and affirmed by the Town indicates that the impact would not be adverse.
- 3. In any future construction of Town buildings, attention should be explicitly given to ways to minimize the potential future costs of energy.

- 4. Support programs to provide education and information about efficient building methods for new and existing residential and commercial buildings.
- 5. The Town recognizes the environmental and health dangers inherent in fossil fuel energy generation and transmission, and thus supports and advocates for energy conservation and efficiency and for development of renewable energy production in place of fossil fuel and nuclear energy while weighing the impacts to the Town.
- 6. The Town recognizes the environmental and health dangers inherent in nuclear power generation and in the transporting and storage of its by-product nuclear waste. The Town therefore prohibits the siting of any nuclear waste repository in Shrewsbury and discourages transporting such waste through Town.
- 7. Wind turbines shall be sited so as not to adversely impact ridgeline aesthetics, shall be careful to not adversely affect view sheds, shall not adversely impact the ecosystems and environments especially of high elevation ecosystems, shall not adversely impact avian and bat populations, and shall not have an audible effect, producing noise above ambient levels, to any area residents.
- 8. Solar energy facilities shall be sited with the least amount of impact to valuable agricultural soils and open space. Solar energy facilities are encouraged to be sited on roofs or in areas where the panels can be situated to allow use under them. If panels are to be sited on agricultural soils or other designated open spaces, panels shall be clustered to preserve the soils and allow for continued use of the land for agricultural purposes.
- 9. Shrewsbury shall require site remediation of decommissioned wind tower sites and ground mounted solar sites.
- 10. Shrewsbury encourages woodland owners to manage woodlots both environmentally and economically, and encourages forest products to be utilized in biomass production through accepted environmentally sound forestry and timber harvesting practices.
- 11. Removal of biomass for energy from Town woodlands and public forest land must require retention of adequate biomass residue from timber and sufficient woody debris to ensure long-term soil health and forest ecosystem sustainability.
- 12. Water energy conversion systems shall be sited appropriately and designed to be in full compliance with all Vermont laws and regulations. Hydro sites shall maintain and protect the environmental and biological integrity of Shrewsbury's streams, brooks, and rivers.
- 13. Shrewsbury shall develop an enhanced energy plan in the near future in response to Act 174.
- 14. Shrewsbury supports car-pool programs and planning for ride-shares for Shrewsbury residents.
- 15. Utility line siting should take into consideration tree location.

- 16. Utility line tree maintenance shall be restricted to the minimum cutting possible.
- 17. The expansion of electric transmission outside of existing transmission corridors shall have minimal environmental impact, minimal impact to neighboring properties, and shall require visual and environmental buffering.
- 18. The Town recommends the non-use of herbicides on all utility rights-of-way. The Town encourages the use of transmission corridors for pasture as an environmentally friendly way of keeping this land cleared.
- 19. Monitor the data on the danger of powerline transmission to populations of animals and people. Take action as required.

### 11. PROGRAM FOR IMPLEMENTATION

The Shrewsbury Town Plan is based on specific objectives concerning the manner in which the Town may accommodate future growth. To achieve these objectives, planning policies are set forth in the areas of prospective land use, preservation of scenic and historic features, transportation, housing, and utilities and facilities. The implementation of the Plan is a local responsibility and can only be accomplished by following the provisions for adoption, maintenance, and implementation as provided for in the Vermont Planning and Development Act.

# 11.1 Adoption of the Plan as Public Policy

The first step towards implementation of the Town Plan is its adoption as public policy. As required by 24 V.S.A. Subsection 4385 (Vermont Planning and Development Act), the Planning Commission must hold at least one public hearing on the proposed Plan. The Commission must then make any necessary revisions and submit the proposed Plan to the Select Board. Under Section 4385 of the Act, the Select Board must hold one or more public hearings on the proposed Plan. The hearings shall be held not less than thirty, nor more than one hundred twenty days after the Plan is submitted to the Select Board by the Planning Commission. The Plan may be adopted by the Select Board after the final public hearing.

# 11.2 Continued Maintenance of the Plan

The Shrewsbury Town Plan must constantly be reviewed and, if necessary, amended to reflect new developments and changed conditions affecting the Town. In accordance with Section 4387 of the Act, the Plan shall expire and have no further force and effect five years from the date of its adoption, unless it is readopted by the Select Board. It can be seen that the initial adoption is therefore the first step of a continual planning process.

For this reason, standing committees should be established by the Shrewsbury Planning Commission to deal with the various elements of the Plan regularly.

# 11.3 Town By-Laws

Adoption of the Shrewsbury Town Plan represents acceptance of its policies for guiding development of the Town. To realize full local control, the Plan should be implemented by adopting, amending, and enforcing the by-laws authorized under Section 4401 of the Vermont Planning and Development Act.

It is the recommendation of this Plan to consider the following resources and methods when developing Shrewsbury's Zoning and Subdivision Regulations:

- a. U.S.D.A. soil maps;
- b. G.I.S. maps;
- c. Transfer of Development Rights (TDR);
- d. Special overlay zones for: deeryards, bear habitat, 100-year flood plain, 2,000- to
- 2,300-foot elevation, streams, wetlands, ridges, well-head protection areas, wild lands, meadowlands and view sheds, historic locations, and structures;
- e. Watershed management;
- f. Parcel mapping;
- g. Buffer zones in relation to siting, set-backs, curb cuts, right-of-way maintenance, etc.;
- h. Extending community involvement in the continuing evolution of planning for Shrewsbury.

All landowners who wish to develop their land are encouraged to meet with the Shrewsbury Development Review Board to go over their development plans before they are finalized. In this way, community concerns can be meshed with the landowner's objectives sooner rather than later to avoid waste of time, expense, and potential conflict for both parties.

### 11.3.1 Unified Zoning and Subdivision Regulations

Presently the Town guides development through the provisions of zoning regulations. Permanent zoning regulations allow the Town to permit, prohibit, restrict, regulate, and determine land development, specifically including the following:

- a. Specific uses of land, watercourses, and other bodies of water;
- b. Dimensions, location, erection, construction, repair, maintenance, alteration, razing, removal, and use of structures;
- c. Areas and dimensions of land and bodies of water to be occupied by uses and structures, as well as areas, courts, yards, and other open spaces and distances to be left unoccupied by uses and structures;
- d. Density of population and intensity of use.
- e. Zoning regulations shall apply to all lands within the municipality. A zoning map depicts the separate districts and their correspondent use classifications.

To guide the development of land, the Town has adopted subdivision regulations. These set forth the procedures, requirements, and specifications for the submission and processing of plats, taking into consideration water supply, sewage disposal, siting, landscaping/screening, and erosion control, as well as other planning and design standards, such as the layout of streets, drainage systems, and other necessary public improvements. Approved plats must be recorded in the Town Office.

It is recommended that the Town maintain and update as needed the unified development ordinance.

## 11.3.2 Individual Sewage Disposal System Permitting

On June 13, 2002, the State of Vermont Legislature passed Bill S.27 reforming State permits applicable to potable water and wastewater systems serving single-family residential properties. All new lots created after June 13, 2002, require a State of Vermont potable and wastewater permit. The Zoning Administrator can provide information on obtaining this permit.

As of July 1, 2007, only a single State permit will be required to construct and install potable water and wastewater systems in Vermont. The State of Vermont mails notification of potable water and wastewater systems to the Shrewsbury Planning Commission and Town Clerk.

## 11.3.3 Flood Hazard Area Regulations

The Flood Hazard Area Regulations outline the dangers and requirements for development within the flood hazard areas in Shrewsbury.

## 11.4 Other Implementation Actions

#### 11.4.1 Land Conservation

The Town of Shrewsbury should encourage and assist landowners to help the Town implement the Town Plan by their individual actions. To this end the Town should make available to landowners the various options available to them in managing and conserving their land. This can be done by making it Town Policy to encourage voluntary transfers of land or rights in land to the State, the Town, or a qualified non-profit conservation organization for conservation purposes.

Donation or sale of land or rights in land to the State, the Town, or a qualified conservation organization (such as a land trust) can be made possible through use of recognized federal income tax incentives, through the establishment of a Shrewsbury Conservation Loan/Acquisition Program, or a combination of these approaches. Any

such donations or sales of land or rights in land would be entirely voluntary on the part of the landowners.

The Town of Shrewsbury should develop a land conservation strategy based on the desire to conserve important resources identified in the Town Plan. This strategy should outline desired conservation approaches to be used to conserve lands and resources identified as high priority for conservation. These strategies may include changes in the unified Zoning and Subdivision Regulations, easements or ownership by local partnerships and land trusts, and ownership by the Town of Shrewsbury, State of Vermont or the Federal government.

### 11.4.2 Official Map

An official map may be adopted showing the location and widths of the existing and proposed rights-of-way of all streets or drainage-ways and the location of all existing and proposed parks, schools, and other public facilities. Such a map may be useful in locating and planning for the items of public capital expenditure.

### 11.4.3 Capital Budget and Program

Expenditures of public funds will be required to implement some of the recommendations contained in the Plan. In this regard, the Planning Commission may establish priorities for an annual capital budget and program for a period of not less than five years.

A capital budget lists and describes the capital projects to be undertaken during the coming fiscal year, their estimated cost, and the proposed method of financing. The capital program is a plan of capital projects to be undertaken during each of the next five years and also projects estimated costs and methods of financing. Both tools may be used effectively in promoting sound fiscal Town management.

Such a budget and program are essential to enable a town to anticipate the need for municipal services and to minimize the burden of providing for them.

The Town shall prepare and adopt a Capital Budget and Program as soon as possible.

## 11.4.4 Water Quality

The Town of Shrewsbury should hold a river corridor education workshop with the Department of Environmental Conservation on flood resiliency and overlays.

#### 11.4.5 Elder Care

A group in the Town of Shrewsbury has been meeting regularly to discuss the support systems needed to make it possible for people to live in place as they age. It is important to support the continued elder care and the "Living in Place" interest group currently active in Town and hold community meetings or forums on the topic.

## 11.4.6 Transportation

Transportation to areas outside of Shrewsbury is a necessity for residents and is one of the main uses of fossil fuels by residents. Sharing rides can significantly reduce energy use and aid residents who are in need of transportation for a variety of reasons. Organize a ride sharing program for Town residents including such tools as a community ride website, Facebook page and support the development of a carpool lot in the Town of Shrewsbury.

### 11.4.7 Energy

Hold workshops on renewable energy options such as solar energy and heat pumps.

The Town of Shrewsbury should consider developing an enhanced energy plan in the near future in response to Act 174.

# 11.5 Relationship to Regional Plan

With regard to any policy statement or other provision of this Plan which may be in conflict with the "Rutland Regional Plan: Land Use," adopted by the Rutland Regional Planning Commission on May 16th, 2006\*, and to which the Town of Shrewsbury was a signatory, the Town of Shrewsbury does not relinquish to the Rutland Regional Planning Commission, or any other entity, (24 V.S.A. Chapter 117, Section 4348 (h)(2))notwithstanding) any authority or rights regarding planning, zoning, or use of lands within the Town.

The Shrewsbury Town Plan is an integral part of the regional and statewide planning process. In adopting the Town Plan, citizens of Shrewsbury may anticipate the future with the knowledge that a significant step has been taken in the development and preservation of their community. The Plan was prepared in conformance with the requirements in the Vermont Municipal and Regional Planning and Development Act (Chapter 117 Section 4382) As well, the Shrewsbury Town Plan is compatible with approved plans from surrounding communities of Mendon, Rutland Town, Clarendon, Mount Holly, and Plymouth. Under the authority of the Select Board, the Shrewsbury Planning Commission prepared this Town Plan.

# 11.6 Relationship Between Plan and Plans for Surrounding Communities

The relationship between this Plan and the development trends and plans for the surrounding area has been considered. For purposes of this Plan, the surrounding area includes the Towns of Mendon, Rutland Town, Clarendon, Mount Holly and Plymouth and the Rutland Region as a whole.

This Plan promotes residential, agricultural, conservation, and small-scale commercial activities at levels consistent with the community's place at the rural, agricultural edge of the Rutland Region and the Town's rich endowment of natural resources.

This Plan recognizes the need to accommodate some population and housing growth within the Town. Review of the land use plans of surrounding communities suggests that the future land use pattern promoted by this Plan is generally compatible with those of Shrewsbury's neighbors.