SHREWSBURY PLANNING COMMISSION REPORT ON THE TOWN OF SHREWSBURY, VERMONT

TOWN PLAN

The Shrewsbury Planning Commission will hold a **Public Hearing** on the 2013 Update of the Shrewsbury Town Plan on **Wednesday, July 24th at 7:00 pm**. The hearing will be held at the **Shrewsbury Community Meeting House**/88 Lottery Rd. in Shrewsbury Center.

We respectfully request comments from all townspeople of Shrewsbury, the Shrewsbury Select Board, Planning Commissions of abutting towns, the Rutland Regional Planning Commission, and the Department of Housing and Community Affairs. Please send comments to the Shrewsbury Planning Commission at 9823 Cold River Rd. Shrewsbury, VT 05738 and/or participate at the Public Hearing.

Pursuant to Title 24 V.S.A. Chapter 117, the Shrewsbury Town Plan is hereby amended for the following purposes/reasons:

- To meet State of Vermont statute that the Town Plan be amended every five years.
- To meet new State of Vermont requirement and guidelines for statewide and regional planning goals (as reviewed by Rutland Regional Planning Commission staff).
- To incorporate those interests, statements made by Shrewsbury residents at the Shrewsbury Town-Community Forum.
- To update current Town data.

Changes made to the document including the following:

- An Economic section was added.
- Added language in Section 2 to describe interaction between state legislative actions and town plans.
- In several places, added wording "forestry" along with agriculture as an economy/activity that is desirable to maintain and encourage in town.
- Updated census, housing, economic (income, jobs, etc.) data to 2010 census data.
- Language added to reflect some of the newer economies in town such as increase in local food production and markets.
- Tropical storm Irene effects described.
- Open space development added as method for maintaining agricultural soils, woodlands, etc.
- Added partial sentence to keep waste out of quarries, etc.
- Added language to recognize need for housing for elderly in Town.
- Added language to address low-moderate income housing in Town.
- Education added info on other forms of education in Town (music lessons, computer lessons, swim lessons, etc.), added info on higher education in area.
- Expanded the Energy section on renewable energy, both commercial scale and residential scale.

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Appendix A -Maps Maps can be found on line at: www.shrewsburyvt.org/planmap.php

TOWN OF

SHREWSBURY, VERMONT

TOWN PLAN



ADOPTED: _____ EFFECTIVE: December 2013 – December 2018 Signatures: _____

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APPENDIX A:

Map 1: SHREWSBURY, VT MUNICIPAL MAP, SHREWSBURY CEMETERIES

Map 2: SHREWSBURY, VT FUTURE LAND USE

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

Map 4: NATURAL RESOURCES, SHREWSBURY, MAP 2 OF 2

Map 5: SHREWSBURY, VT CONTOURS

Map 6: SHREWSBURY, VT AERIAL MAP

Map 7: SHREWSBURY, VT WATERSHEDS

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 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 historical rural character of the community and the natural beauty of its mountain setting, containing large areas of wooded and open land, wetlands and other habitat.

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.

We believe that 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. We are concerned about the impact of major projects within the Town and surrounding areas. On our western and northern boundaries expansion from Rutland could easily bring residential development into all areas of Shrewsbury. We are seeing major development of large stores along Route 7 in the vicinity of the Diamond Run Mall and are concerned about their impact. We may also experience development pressure of our 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 our best collective thinking.

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 contemplate that Shrewsbury should reflect the type and intensity of new development occurring elsewhere; rapid 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" that is being altered, diminished and lost forever elsewhere. In so doing, the Town and its residents are exercising their best stewardship for these resources with which nature, history, and geography 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 five 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 five years or until amended.

As a policy document, the Plan provides the legal as well as the conceptual basis for all land use control. The specific controls are accomplished by the enactment of coordinated by-laws: 1) zoning regulations; 2) local subdivision regulations; 3) flood hazard areaby-laws; 4) capital budget program; 5) 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, sponsored by the town itself or groups serving the town can implement the goals of the plan to ensure that Shrewsbury's plans for its future is 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 or the municipal purchase of development rights which could preserve undeveloped lands.

The following list of maps in this text, together with those maps 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. Flood Plan map.

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 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 of natural resources, the protection of fragile areas, and the preservation of agricultural land, forestlandand 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 our Town;
- 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 protect aquatic and upland ecosystems, critical animal habitats and corridors, and wild areas;
- 3.12 To encourage energy efficiency, energy conservation and non-polluting renewable energy production.

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-toblack 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, its forestry value, and its 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 us to see <u>where</u> each of these different soils exists in our town. We can tell, for example, whether a currently forested acre has good septic capability or if it is some of the town's best agricultural crop land.

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, 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 Vegetation

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. 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.

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. 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 and moose and bear sightings are on the increase. 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.

4.1.9 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%. 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 \$64,050. 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 seventy-two% percent (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.

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, while 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 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. Finally The Vermont Department of Forests, Parks, and Recreation supervises the Coolidge State Forest. The Vermont Department of Forest Service National Park Service maintains the Appalachian Trail corridor. The total acreage of these State and Federal lands is approximately 7,105 acres. The total acreage in Shrewsbury is 30,830 acres.

With reference to the Coolidge State Forest, in July, 2008, the Depts. of Vermont Forests, Parks and Recreation and the Vermont Fish and Wildlife 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, 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.

An indication of the interest in forestry by landowners in Shrewsbury is that landowners have placed 10,638 acres in the Use Value Appraisal (AKA Current Use) Program (Vermont Dept. of Taxes, 2005). In addition, sixteen individual landowners, working with the Vermont Land Trust (VLT), have placed conservation easements on approximately 1,880.8 acres. 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 we have is our 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), farmer's 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 Prospective Land Use

4.3.1 Settlement Constraints

An analysis of natural factors influencing prospective land use has identified certain elements that place critical constraints on future developments. 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 should 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 percent without proper precautions may threaten the stability of the property being developed and the quality of the surrounding property. On-site 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. Consequently, slopes steeper than 15% present extreme difficulty in complying with the Vermont Health Regulations governing subdivisions.

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 15%, an erosion control plan shall be required.
- 2. Any development on areas containing slopes of 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. Construction in flood plains requires adequately constructed foundations which will be reviewed in the permit process. See Flood Hazard Policy Regulations.
- 2. All development other than those areas and structures essential to the operation of agriculture, forestry, outdoor recreation, and wildlife protection shall be strongly discouraged in flood plain areas. See Flood Hazard Policy 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 be restored.

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 or recreational purposes, or may simply be an area especially valued by Townspeople. Because they are essential in 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 3720 feet above sea level. On high elevations, generally above 2000 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, any 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 2000 feet shall be protected with respect to intensive (i.e. destructive) uses and commercial recreation. The Shrewsbury zoning bylaws shall require a site review procedure for development at elevations between 2000 and 2300 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 2300 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 setback by at least 100 feet from Wetlands.

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.

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. The Town's zoning regulations require that any proposal for development or agricultural use should be setback by at least 100 feet from surface waters.

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. 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.
- 3. It is Town policy that no development, agricultural or forestry practice in Shrewsbury shall degrade or otherwise adversely affect the water resources of the Town.
- 4. Watersheds shall continue to function as biologic units. Habitat, agriculture, and forestry shall be interconnected and not fragmented.
- 5. It is Town policy to encourage owners and residents of watershed areas 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 settlement that would 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. The wetlands areas within the Town fulfill this 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 State Forest, the Plymsbury Wildlife Management Area, and Parker's Gore, the wildlife corridor in Mendon, also provide valuable wildlife habitat. In fact, our Town contains excellent habitats for bear, deer, bobcat, furbearers, moose, turkey, snowshoe hare and other animals which require large contiguous tracts of land for survival. In addition, the several lands in trust, or lands on which development rights have been sold or donated, offer a future guarantee for wildlife habitat's existence.

Preservation of den trees and a good distribution of trees in various age classes over the entire area simulating natural, unmanaged forests, are critical to preserving a variety of wildlife species.

As development in the wild places of neighboring towns eliminates essential habitat and corridors for many wildlife species, it is necessary that Shrewsbury protect its critical habitats if the Town wishes to enjoy the presence of a variety of wildlife, and to ensure continued biodiversity.

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.
- 2. The Town should request that the existing Conservation Commission, in consultation with the Vermont Department of Fish and Wildlife, identify important wildlife habitat and to propose measures to improve habitat and to assure a healthy and diverse wildlife population in the Town.
- 3. Landowners are encouraged to work with land trusts and other organizations to protect critical wildlife habitat.

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 Molybdinite 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 better farming sections of the Town. 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 have been, and will continue to be, viable:

- * commercial and personal vegetable gardening including CSA farming
- * sheep and goat-raising for wool, fleece, milk, cheese and meat
- * small/micro dairy farming for raw milk production
- * beef cattle
- * maple sugaring
- * Christmas trees, ornamental, shade and fruit stock
- * fruits, such as apples, blueberries, raspberries and strawberries
- * herbs, fresh and dried flowers, specialty crops

Agricultural land use will continue to have a tremendous effect on the visual appeal and value of Shrewsbury's landscape. After 200 years of cultivation, the 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 rural character and scenic value of the Town; therefore, we commit to preserving the remaining agricultural land and to assuring that farming remains a viable economic enterprise in Shrewsbury.

Whatever we do in Shrewsbury, we do it on soil. The more the requirements of our land uses match the properties of the underlying soils, the more we are likely to have a productive, healthy, and vigorous community now and in the future.

Development of agricultural lands provides at best a shortsighted benefit. Loss of productive land may reduce our long-term ability to support our population. Conversion to non-agricultural use increases costs to the community and diminishes our capacity for agricultural production. Fragmentation of lands reduces their agricultural and natural heritage value.

The State of Vermont has developed Accepted Agricultural Practices which are a base level of management for all farms in Vermont. These management practices are designed to reduce non-point source pollution to surface waters from agricultural activities. Implementation of Accepted Agricultural Practices by Vermont agricultural operators creates a rebuttable presumption of compliance with Vermont Water Quality Standards and the Vermont Wetland Rules.

Policy 11—Agricultural Lands

- 1. Agricultural soils are a critical resource and quality agricultural soils should be protected. Development should be concentrated primarily on those soils low in potential agricultural value.
- 2. 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 will 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.
- 3. Settlement on and/or development on Prime agricultural land should be discouraged. Settlement on Statewide or locally important soils should occur only in locations, patterns, and densities which will not substantially reduce the area or the productivity of these lands.
- 4. The Town shall consider a variety of techniques to maintain the agricultural productivity of prime, state, and locally important agricultural soils, including:
 - 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.
- 5. The Town, through its Planning Commission, should develop a plan for farmland preservation and 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.

4.3.3.2 Woodlands

The Town's woodlands are an important resource for aquifer recharge, plant and wildlife habitat, and recreation, as well as timber production. Properly managed woodlands 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 woodlands for the benefits they provide, it should encourage sound forest management practices and should provide incentives for improvement of these private woodlands. The Town must have both unmanaged and properly managed woodland in order to support health and biodiversity.

In cooperation with the County Forester, the Town should seek to educate eligible woodland owners about available forestry assistance programs. Through distribution and display of printed information, the Town should encourage woodland 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 woodland management), and Federal Cost-Share Programs (partial funding of costs of forest treatment). In cooperation with owners of well-managed woodlands, the Town could designate demonstration woodlots for educational purposes.

Because the Town contains a large quantity of public forest land, 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.

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 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 woodlands as a Forest Preserve in order to maintain a viable expanse of public and private lands in natural, unfragmented, or unmanaged forest conditions.

Accepted Management Practices for Maintaining Water Quality on Logging Jobs in Vermont (AMPs) were developed to implement <u>*Title 10 V.S.A. Chapter 47: Water Pollution Control*</u> 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 – Woodlands

- 1. Settlement 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. The Town should promote conservation and management of private woodlands by educating landowners about optimum forestry practices and available State forest management programs.
- 3. The Town should consider a variety of techniques to conserve undeveloped woodland, including:
 - 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.
- 4. Woodlands 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.
- 5. 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.
- 6. The long-term objective for private and public forest lands 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.
- 7. 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.
- 8. 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:

- a) <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;
- b) glare -- 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;

- c) <u>intrusive light</u> -- poor outdoor lighting shines off the owner's property;
- d) <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 our 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 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 will 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 or development causing noise from sighting in deer rifles to considering potential noise from a cottage industry, a 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 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 has 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 (fill) and properly re-graded 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**, 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 has 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 and parsonage, 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, Vermont Industries (retail business for wrought iron furnishings), one-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 and incompatible development is increasing. Settlement should be encouraged in existing centers.

Policy 16 - Population Centers

- 1. The pattern of settlement shall maintain and reinforce our 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 negative 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 our zoning ordinances continue to address these issues and others that may arise.

Policy 17 - Commercial Development

- 1. Commercial development necessary 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 as a viable activity.

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 our streams and the land uses, most notably, the location of our 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, clearcuts and shelterwood cuts, could have a significant

effect on the Town's physical landscape.

Policy 22 - Landscape Form: Ridgelines, Mountain Peaks & 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; andi) 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 residential development.

Policy 28 - Landscape Pattern: Farms

- 1. Emphasis shall be given to the preservation and encouragement of suitably scaled agricultural activities in Shrewsbury that are suitably scaled. 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 State Forest, Plymsbury Wildlife Management Area, and the Long Trail/Appalachian Trail Corridor. They total approximately 7,512 acres. These lands are an important 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.

5.1.2.5 Scenic Views

Shrewsbury is well endowed with scenic views both within our 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.

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 corridor or other new right-of-way nor any new transmission lines 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. 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 our 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.

*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

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 such as ours 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, we 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

	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%

*ACS 2005-2009

**Jan-June 2012

6.4 Housing Affordability

6.3 Future Needs

The statistics above indicate that the Town's population increased by only one person from 1990 to 2000. It is expected that in the next 10 years, the population of Shrewsbury will level off. Therefore, growth is somewhat stagnant.

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

		2010
\$35,000	\$48,472	\$60,179*
\$22,500	\$22,206	\$35,833*
\$38,167	\$45,938	\$62,917*
	\$22,500	\$22,500 \$22,206

*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." In 2000, the median household income in Rutland County was \$36,743. In the case of households in Shrewsbury, it is clear that the median household income is significantly higher. However, if we split these numbers between renter households and homeowner households, we note that 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. In addition, the proportion of renter occupied housing increased from 14% to 17% of the total housing units from 48 to 62.

"Housing costs should be no more than30% 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 due to the following: The Town offers very few jobs and/or services which makes it essential to own and operate at minimum one car per household; a home's heating oil costs typically cost \$3000 or more per winter season. 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.
- 3. 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.
- 4. 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.
- 5. The Town will encourage the siting of higher density developments in village and hamlet areas.
- 6. The Development Review Board (DRB) will expedite the permit review process.
- 7. The Zoning Regulations will allow conversion of larger houses into multiple units.

Policy 36 - Siting Of Residential Development

- 8. The Shrewsbury Zoning bylaws shall specify maximum residential densities, to be determined in part through careful consideration of land capabilities and existing neighborhood characteristics.
- 9. 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.
- 10. The Planning Commission shall explore incentives for encouraging new housing to be located in existing areas of high density.
- 11. Encourage housing projects to set aside land for open space and conservation programs.
- 12. New housing shall be sited to preserve the natural, scenic, and agricultural aspects of the site as a priority.
- 13. The Town may establish design control districts (such as Historic Districts) with general design control regulations, which may include, but not limited to, height, size, number of living units, density and overall appearance.
- 14. 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

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, a variety of agricultural esablishments (for more details on agriculture see Section 4.3.3.1 Agricultural Lands), 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, the world wide web, 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 web. 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), farmer's 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 seventy-two% percent (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 median household income in Shrewsbury is \$64,650 which is higher than the State median income of \$52,776 and the Rutland County median income of \$49,201 (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 ?) 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.

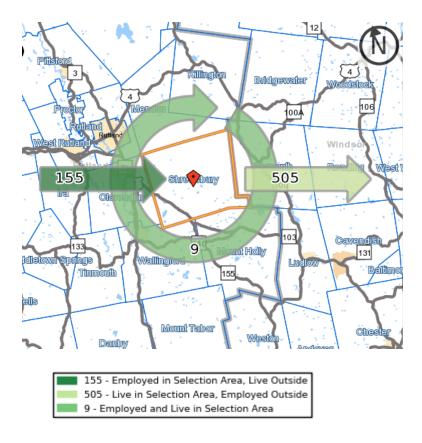


Figure ?: Shrewsbury Out Flow/In Flow Communiing Patterns

Shrewsbury's unemployment rate has increased from 2.3% and 2.1% in 2000 and 2005, respectively, to 6.1% in 2010. This rise in unemployment is similar to the rise in unemployment for the Rutland Labor Market Area.

Area Unemployment Rates					
Town	Unemployment Rate				
	2000	2005	2010		
Clarendon	2.7%	3.3%	5.9%		
Danby	2.4%	2.7%	5.8%		
Mt. Holly	3.0%	3.2%	6.2%		
Mt. Tabor	1.8%	7.1%	7.8%		
Rutland City	3.0%	3.6%	8.7%		
Rutland Town	1.5%	1.7%	2.7%		
Shrewsbury	2.3%	2.1%	6.1%		
Tinmouth	2.7%	3.6%	4.2%		
Wallingford	2.5%	2.3%	6.4%		
West Rutland	2.8%	3.4%	10.7%		
Rutland Labor Market Area	3.1%	3.7%	7.4%		

Source: VT Department of Labor

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, 2012 asked Shrewsbury residents their vision for the future. Ideas related to economic activity expressed a desire for small industry and stores, home cottage businesses, green enterprises, 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 it allows elderly homeowners to continue to stay in their homes with the help to manage their property and homes. 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, farmer's markets. 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 and to erect signs and lights and protective barriers to make our roads similar to those found in suburban developments.

According to the Vermont Census Transportation Planning Package, 53 % of Shrewsbury's adult working population commutes to Rutland City or Town. Route 103, the major east-west principal arterial serves Cuttingsville and 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 has completed a culvert inventory which is mapped, indicating the location and condition of all culverts in the town. This is valuable as input for capital planning and should be kept up to date.

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. 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, our 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 our roadsides, nor straight salt on our roads.
- 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.

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)

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 most recent traffic counts recorded between 5800 and 6200 vehicles in 2006 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 on these roads show 1000 vehicles as the average annual daily traffic in 2005 on Cold River Road, 180 vehicles in 2004 on Eastham Road and 470 vehicles on Lincoln Hill Road.

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), Keifer Road, Old Plymouth Road, Spring Lake Road, Russellville Road, Lottery Road, Adams Road (TH5), and Baily 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 and in the winter by 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)
- 1. 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 no public transportation service in Shrewsbury, and the closest service is located in Rutland City.

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, helps to retain existing businesses, and also opens the region to long distance travel.

Policy 45 - Public Transit

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 our 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 consistent 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 Selectboard.

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, or that are maintained by the Town. 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, but conforming to State erosion-control standards and Town specifications.

Policy 50 - Maintenance

1. Town roads and 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 provides education for its children at two schools:

- The Shrewsbury Mountain School in Northam serves children from pre-school through grade 6.
- The Mill River Union High School in North Clarendon educates children from Shrewsbury, Clarendon, and Wallingford in grades 7 through 12.

Our schools 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.

Our goal is to continue to provide quality educational opportunities for our young people. However, a balance must be struck between the needs of our students and the ability of the Townspeople to meet the resultant tax burden. An alliance must be forged between our educators, the School Board, and town officials to seek creative solutions at every opportunity to maintain the quality of our education while assuring affordable taxes for all residents. Some possible areas to explore in the Mountain School would be:

- Use existing space creatively—room dividers and effective design (flow/desks and seating/storage space)
- Create areas dedicated to small reading groups and music lessons

Act 60, the State's Education Act, mandates a fixed allocation for each student. When the student population declines, the total allocation to a town declines correspondingly—yet the school's fixed costs remain the same. Therefore, the taxpayer must pay for the costs not met by the State.

In 2002, Shrewsbury was required to contribute to the State fund to support education in less affluent towns. We are faced with this challenge in the light of some sobering statistics: Given the general aging of the Town's population, the tax burden will be shared increasingly by more people on fixed incomes.

Shrewsbury taxpayers must also shoulder the responsibility for Special Education costs. These State-mandated costs fluctuate, depending on the needs of students in the school system. Special Education costs can be high and are difficult to anticipate and budget.

The Shrewsbury Community 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 year after year. Library fund-raisers are significant cultural and social events for the community.

Higher Educational opportunities within a short driving distance include several colleges (St Joseph's in Rutland, Castleton State College in Castleton); a community college (Community College of Vermont in Rutland), and the Stafford Technical Center, also in Rutland, offers adult and continuing education in several fields.

Many other types of education are available in Shrewsbury by means of group and/or private lessons offered by town residents. 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. Swimming lessons are available in the summer through the Shrewsbury Outing Club and therapeutic horsemanship is also offered by certified instructors.

A small private organic dairy farm in Shrewsbury is hoping to "be a place where younger generations can come to learn the business of small-scale, locally marketed agriculture" according to its statement on the Vermont Land Trust website.

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

Shrewsbury Mountain School							
Grade	2004-2005	2007-2008	2010-2011	2011-2012	2012-2013		
Preschool *	14	7	19	13	13		
K	10	8	4	11	7		
1	10	9	9	4	12		
2	9	7	7	10	6		
3	9	9	8	6	9		
4	4	9	4	8	7		
5	10	12	3	6	9		
6	8	10	10	3	5		
Total	74	71	64	61	68		
Elementary							

School Population: (Data from Town Reports) Shrewsbury Mountain School

***Please note the addition of preschool figures to official school population.**

Grade	2004-2005	2007-2008	2010-2011	2011-2012	2012-2013
7	8	6	10	8	4
8	19	13	15	10	9
9	13	11	8	15	9
10	22	9	9	9	13
11	15	15	11	6	8
12	22	15	9	12	4
Total	99	69	62	60	47
Mill River					
GRAND	173	140	126	121	115
TOTALS					

Mill River Union High School

Policy 51 - Education

- 1. Develop strategies to meet school expenses, including special education costs, keeping any tax increases to a minimum.
- 2. Continue program of sinking funds for transportation and long-term maintenance.
- 3. Explore alternative methods of revenue-raising.
- 4. Continue to support Shrewsbury Library.

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 2000 census indicated that there were 50 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, 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 statewide 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 acquired a baler that is generating 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 we can take to achieve our 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 should 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 Town Solid Waste Ordinance, Sewage Disposal Ordinance and 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 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 and recycled, including construction and 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 fund-raising. In 2007, 42% (\$18,720) of its annual operating budget was raised by the SVFD, with the Town contributing the remainder, \$26,000.

The Town voted in March, 1995, to establish a sinking 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. 1971 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. The constables, elected for one year, are "law enforcement" constables.

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 \$4.25.

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.

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

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 Glenn 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, and the area adjacent to the Brown Covered Bridge. The Town also owns the transfer station in Northam and the Town garages in Northam and Shrewsbury Center, the Town Office, and the Town Hall.

Inventory of Town Road Equipment:

2004 Ford 350 4X4 2002 International with plow and sander 1998 International with plow and sander 1996 L-8000 with plow and sander 1991 L-9000 Ford with plow and sander 1986 L-9000 Ford 4X4 with plow and sander Miscellaneous Tools 2000 928 G Cat Loader 1996 416 B Cat Backhoe 1992 120 G Cat grader 1968 tractor and mower 6 two-way radios York Rake

9.11 Cultural Assets

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 the 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 now the Shrewsbury Parsonage.

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 lumber baron. Laurel Glenn, the Cuttingsville cemetery, contains Bowman's white marble mausoleum where sculpted life-sized, he waits for his wife at the mausoleum door, his hat held over his heart.

Shrewsbury offers a broad variety of historic sites, an active Historical Society, and an interesting Historical Museum located in the former Cuttingsville Church.

9.13 Emergency Management

Shrewsbury is subject to a variety of hazards, both natural and man-made. Floods, lightening 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 Selectboard, 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 insure that Shrewsbury citizens, particularly the elderly and those needing assistance, are equipped to meet particular emergencies. The program functions under the direction of the Selectboard 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.

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.
- 3. Hold training drills to effectively mitigate potential hazards.
- 4. 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 *Shrewsbury Times* and at local and regional workshops
- 7. Keep Emergency Response plans up to date.
- 8. Actively participate in mutli-town emergency preparedness activities while striving to be self-sufficient wherever possible.
- 9. Promote emergency safety among households in Shrewsbury.

10. ENERGY

The primary sources of energy in Shrewsbury currently are:

- 1) Wood, solar, oil, and propane for heating;
- 2) Green Mountain Power for electricity; and
- 3) Gasoline for transportation.

Of these, wood and solar are the only ones produced locally and sustainably. Wood is the only one whose price reflects local supply-and-demand factors. Although the other sources generally seem out of our control, there are choices we can make about where our energy comes from and how much of it we use.

10.1 Energy Production

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. With recent technological advances, these methods have become more practical than ever in Shrewsbury's climate.

The energy consumption of a household is its major environmental impact. This should be limited through both energy conservation and on-site production to the greatest extent practical. Wood burning is currently widely used, and transition to more efficient, cleaner-burning stoves and boilers should be encouraged. Development should be reviewed with respect to passive and/or active solar generating and co-generating opportunities. Small-scale hydro has historically been a major energy source in Shrewsbury and could be again, though thorough assessment and regulation must be provided to protect the environmental and biological integrity of our streams, brooks, and rivers. Exploration and development of small-scale wind power generation should also be encouraged, with thorough site assessment to mitigate adverse impacts.

Commercial Scale Energy:

Nuclear:

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 our Town.

Hydro:

There are several water resources in the Town of Shrewsbury which could potentially be used to develop utility-scale hydro power.

It will be important for Shrewsbury residents to be engaged in any proposals for commercial scale hydro projects in our town and region, and determine how to balance the policies of this

plan with the potential for hydro energy production.

Wind:

The debate over large-scale wind turbines has begun in Vermont. One smaller wind farm, in Searsburg, has been operational for several years, and several other large scale wind farms have recently been constructed and are operating in the northern Vermont. There are currently identified projects and applications before the Public Service Board for large scale wind farms pending in nearby towns of Rutland County. The operating large scale wind farms in northern Vermont have not gone without controversy over their environmental and aesthetic impact and many residents in surrounding communities are reporting of environmental and aesthetic impacts including adverse noise emissions as described by the local residents within several miles of the wind farm.

It will be important for Shrewsbury residents to be engaged in any proposals for commercial scale wind projects in our town and region, and determine how to balance the policies of this plan with the potential for wind energy production. Many of the recent wind farm projects have been built on ridgelines 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 adverse flicker produced by the rotating blades. Wind farm project development review will need to include not only the turbine sites, but the access roadway and the electrical transmission lines.

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 maped resources in Natural Resource Map 1 of 2 and Meadow Lands Zoning Overlay Map). Open spaces, fields and other soils that have agricultural and aesthetic potentialshould be evaluated for conformance with the Town Plan prior to the siting of large scale solar projects

It will be important for Shrewsbury residents to be engaged in any proposals for commercial scale solar energy projects in our town and determine how to balance the policies of this plan with the potential for solar energy production.

Biomass:

Commercial/Industrial biomass plants rely on local resources such as timber and water. Shrewsbury's woodlands can provide its residents a local economic resource as well as create necessary and beneficial wildlife and recreational environments.

It will be important for Shrewsbury residents to be engaged in proposals for commercial scale biomass projects in our town and region, and determine how to balance the policies of this plan with the potential for biomass energy production and generation.

Residential Scale Renewable Energy :

Residential scale renewable energy systems can produce electricity, hot water, heat, and benefit property owners in additional ways. Solar panels, wind turbines, and small hydro generation units, 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 Service Board (PSB). A net metered system cannot be connected to the utility grid until a Certificate of Public Good (CPG) has been granted by the PSB. The PSB currently accepts net metering applications with 150 kW of generation or less and the applications are broken out in two categories: non-photovoltaic systems up to 150 kW or photovoltaic (solar) systems greater than 10 kW in capacity up to 150 kW. For photovoltaic systems below 10 kW landowners can review the procedure for these systems by contacting the Vermont Public Service Board.

Solar:

There is significant potential for small-scale solar energy conversion systems to be interconnected with and compliment existing power sources, provide hot water and heat, and provide electricity to those not connected into the utility grid, with the benefit of reducing the use of fossil fuel resources.

Solar energy can be utilized as a passive source by situating a building or home to maximize its solar potential, or by an active source by utilizing panels to create electricity or hot water systems. Active solar systems can be roof mounted or ground mounted. 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.

The Town and residents should be engaged in proposals for residential scale solar energy projects, either through the Public Service Board and Town Planning Commission for netmetered proposals, or through the Town zoning and planning process for off-grid proposals of these systems.

Wind:

There is significant potential for small-scale wind energy conversion systems to be interconnected with and compliment existing power sources. However, some of the same potentially adverse effects of large scale wind energy facilities such as the scenic and aesthetic impact and the noise and the visual impact of large rotating machinery to nearby residents must be evaluated in the siting of such projects.Residential size wind turbine installations built on ridgelines or above 2300 feet elevation would be not allowed per Town Plan section 4.3.2.1, Policy 5 Elevations Above 2,000 Feet. Development issues include aesthetics of the scenic impact because residential wind turbine installations may be as high as 127 feet with rotating blades. They are thus very visible and a significant impact to a view shed especially if they project above the horizon.

Residential wind turbines produce noise which potentially is present 24/7/365 and can be audible for over 1000 feet away. Noise disturbances of this nature are not allowed per the Town Plan section 4.3.3.4, Policy 14 Noise Pollution. Additional development issues with residential wind turbine installations can include impacts to wildlife corridors, avian, and bat populations. Access roads to turbine sites also need to be evaluated to be in conformance with local and State laws and regulations.

The Town of Shrewsbury recommends that residents who are considering a residential scale wind turbine installation review the Vermont Public Service Board guide: *Siting a Wind Turbine on Your Property*, during their planning process.

The Town and residents should be engaged in proposals for residential scale wind energy projects, either through the Public Service Board and Town Planning Commission for netmetered proposals, or through the Town zoning and planning process for off-grid proposals of these systems.

Hydro:

There is potential for small-scale water energy conversion systems to be installed and utilized for on-site electrical needs, and if granted a Certificate of Public Good by the Public Service Board; connection into the utility grid. Water energy conversion systems, whether they are small dams, or run-of-the-river style need to be sited appropriately and designed to be in full compliance with all Vermont laws and regulations. Hydro sites should also maintain and protect the environmental and biological integrity of our streams, brooks, and rivers.

The Town and residents should be engaged in proposals for residential scale water energy conversion projects, either through the Public Service Board and Town Planning Commission for net-metered proposals, or through the Town zoning and planning process for off-grid proposals of these systems.

Policy 62 - Energy Production

- 1. Encourage household energy conservation through the use of more efficient, cleanerburning wood stoves and boilers, as well as better insulation 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. The siting of any nuclear waste repository in Town is prohibited, and the transporting of such waste through Shrewsbury is discouraged.
- 4. Encourage alternative methods of small-scale energy production, and review new development concerning its energy-production capacity.

- 5. Wind turbines- shall be sited so as not to adversely impact ridgeline aesthetics, shall be careful to not adversely effect view sheds, shall not adversely impact the ecosystems and environments especially of high elevation ecosystems, Shall not adversely impact avian and bat populations, shall not have an audible effect, producing noise above ambient levels, to any area residents.
- 6. 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.
- 7. 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.

Water energy conversion systems shall be sited appropriately and designed to be in full compliance with all Vermont laws and regulations. Hydro sites should also maintain and protect the environmental and biological integrity of our streams, brooks, and rivers.

10.2 Energy Transmission

Shrewsbury currently has two major electrical power transmission corridors. These have environmental and aesthetic impacts on the Town such as electromagnetic radiation, wildlife corridor interruption, and the visual impact of clear-cut swaths across ridgelines and hillsides.

Utility lines inappropriately sited along our roadsides also have an aesthetic impact. The treetrimming 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 Transmission

- 1. Utility line siting should take into consideration tree location.
- 2. Utility line tree maintenance shall be restricted to the minimum cutting possible.
- 3. Do not allow expansion of major energy (electric or gas) transmission outside of the two existing corridors, and require buffering of visual and environmental impacts of corridors.
- 4. The Town recommends the non-use of herbicides on all utility rights-of-way. We encourage the use of transmission corridors for pasture as an environmentally friendly way of keeping this land cleared.

5. Monitor the data on the danger of powerline transmission to populations of animals and people. Take action as required.

10.3 Energy Conservation

We recognize that it is in the public interest to conserve energy in all its uses. Doing this depends heavily on public understanding of alternative approaches, available technologies, and relative costs.

The Town recommends the implementation of an active energy conservation education program.

Policy 64 - Energy Conservation

- 1. Information should be made available to Townspeople about home energy audits, public energy-saving programs, and the availability of energy-conserving technologies and products.
- 2. Encourage optimal levels of energy efficiency for buildings and outdoor lighting.
- 3. Include provisions in the zoning and subdivision regulations that encourage prospective builders to consider energy-efficient locations and site configurations.
- 4. Encourage commuter networking. Encourage the use of carpools and use and expansion of regular bus and rail service between Rutland and Cuttingsville (currently Vermont Transit offers service twice daily.)
- 5. Develop bicycle paths along existing transportation corridors.

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 them 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, 2000- to 2300-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.

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 or 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.

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 Zoning 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, including specifically, without limitation, 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.

Zoning regulations shall apply to all lands within the municipality. A zoning map depicts the separate districts and their correspondent use classifications.

11.3.2 Subdivision Regulations

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 develop a unified development ordinance which combines the zoning and subdivision regulations into one document creating a "unified" ordinance with a consolidated review and permitting process.

11.3.3 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.

11.3.4 Flood Hazard Area Regulations

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

11.3.5 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.

11.3.6 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.

Policy 65 - Capital Budget And Program

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

11.4 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.

Policy 66 – Updating Of Bylaws

1. The Planning Commission will continue to update the zoning, subdivision, and flood hazard area regulations as needed and /or required.

<u>11.5 Relationship Between Plan and Plans for Surrounding Communities</u></u>

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 our neighbors.