

2014 ROXBURY TOWN PLAN

THE GEOGRAPHICAL CENTER OF VERMONT

ROXBURY, VERMONT

We dedicate our 2014 Town Plan in loving memory of

Jamie Hedding 1969 ~ 2013

Who lived his whole, far too short life, in Roxbury

TABLE OF CONTENTS

I.	PURPOSE AND AUTHORITY	PAGES 1-3
	1. FORWARD	
	2. PURPOSE	
	3. AUTHORITY	
	4. CITIZEN PARTICIPATION	
	5. FORMAT OF THE PLAN	
	6. ACKNOWLEDGEMENTS	
II.	A BRIEF HISTORY OF ROXBURY	PAGES 3-4
III.	INVENTORY, ANALYSIS AND RECOMMENDATIONS	PAGES 5-49
	1. PHYSICAL FEATURES, NATURAL AND CULTURAL RESOURCES	5
	1.0 PHYSICAL FEATURES	
	A. SETTING	
	B. TOPOGRAPHY	
	1.1 NATURAL RESOURCES	5-12
	A. WATER RESOURCES	
	1. SURFACE WATER	
	2. FLOOD RESILIENCE	
	3. GROUNDWATER	
	B. LAND RESOURCES	
	1. SOILS	
	2. FORESTS	
	3. MINERAL RESOURCES	
	C. WILDLIFE	
	1. HABITAT FRAGMENTATION	
	2. DEER WINTERING AREAS	
	3. RARE AND ENDANGERED SPECIES	
	1.2 CULTURAL RESOURCES	12
	1. AGRICULTURAL RESOURCES	
	2. HISTORIC RESOURCES	
	3. SCENIC RESOURCES	
	4. PUBLIC OUTDOOR RECREATION AREAS	
	1.3 RECOMMENDATIONS & OBJECTIVES	13-14
	2. DEMOGRAPHICS	14-17
	2.0 OVERVIEW	
	2.1 POPULATION PROFILE	
	3. ECONOMIC DEVELOPMENT	17-19
	3.0 OVERVIEW	
	3.1 ROXBURY'S OCCUPATIONAL PROFILE	
	3.2 RECOMMENDATIONS & OBJECTIVES	
	4. HOUSING	19-24
	4.0 STOCK AND TREND	
	4.1 COST AND AFFORDABILITY	
	4.2 RECOMMENDATIONS & OBJECTIVES	
	5. TRANSPORTATION	24-27
	5.0 OVERVIEW	
	5.1 RAIL	
	5.2 TRANSPORTATION AND SERVICES	
	5.3 HIGHWAYS	
	5.4 BIKE PATHS AND PEDESTRIAN WAYS	

	5.5 RECOMMENDATIONS & OBJECTIVES	
6.	COMMUNITY UTILITIES, FACILITIES AND SERVICES	27-37
	6.0 EDUCATION	
	A. ENROLLMENT AND SCHOOL CAPACITY	
	1. PAST TRENDS	
	2. CURRENT TRENDS AND FUTURE PROJECTIONS	
	6.1 ROXBURY FREE LIBRARY	
	6.2 ROXBURY HISTORICAL SOCIETY	
	6.3 RECREATION	
	6.4 LAW ENFORCEMENT	
	6.5 FIRE DEPARTMENT	
	6.6 HEALTH CARE	
	6.7 SOLID WASTE	
	6.8 SEWAGE DISPOSAL AND WATER SUPPLY	
	6.9 TOWN ADMINISTRATION	
	6.10 CEMETERIES	
	6.11 CHILD CARE	
	6.12 RECOMMENDATIONS	
	6.13 SENIOR SERVICES	
	6.14 SOCIAL SERVICES	
	6.15 UTILITIES	
	6.16 RECOMMENDATIONS AND OBJECTIVES	
7.	ENERGY	38-40
	7.0 ENERGY RESOURCES	
	7.1 ELECTRICITY	
	7.2 HEATING FUEL	
	7.3 TRANSPORTATION FUEL	
	7.4 RENEWABLE ENERGY SOURCES	
	7.5 RECOMMENDATIONS AND OBJECTIVES	
8.	GOVERNMENT FINANCE	40-42
	8.0 REVENUES	
	8.1 GRAND LIST AND TAX RATE	
	8.2 RECOMMENDATIONS AND OBJECTIVES	
9.	LAND USE	42-48
	9.0 INTRODUCTION	
	9.1 FOREST RESERVE DISTRICT	
	9.2 AGRICULTURAL – RESIDENTIAL DISTRICT	
	9.3 VILLAGE AND LIMITED BUSINESS DISTRICT	
	9.4 RECOMMENDATIONS AND OBJECTIVES	
10.	REGIONAL COOPERATION	48-49
	10.0 OVERVIEW	
	A. WARREN	
	B. BRAINTREE	
	C. GRANVILLE/EAST GRANVILLE	
	D. BROOKFIELD	
	E. NORTHFIELD	
IV.	MAPS	
	1. HOUSING RESOURCE MAP	
	2. CURRENT LAND USE	
	3. FUTURE LAND USE	
	4. NATURAL RESOURCES	
	5. TRANSPORTATION MAP	

I. Purpose and Authority

1. Foreword

The town of Roxbury, chartered in 1781, has historically been dependent upon natural resources to support its population, which in 1860 peaked at over 1000. With a sharp decline in viability of land-based businesses, the population of Roxbury dropped to a modern low of 354 people in 1970. Continued growth can be noted as the population rose in 2000 to 576 and in 2010 to 691. People have been attracted to Roxbury for a variety of reasons, including its rural and unspoiled character. Most of the wage earners in town are employed outside Roxbury, although there is a higher proportion of self employed residents here than in surrounding towns, indicative of the independent nature of its residents. As a small town with limited resources, relatively minor changes in Roxbury's population may have great impacts on town services and taxpayers' ability to support them. For instance, low housing and land values leave Roxbury vulnerable to increased growth due to development in nearby towns. A potential increase in low – wage service positions associated with major improvements at neighboring ski resorts may have profound effects on the town of Roxbury in the years to come. These scenarios clearly demonstrate the necessity of planning for the future. According to a 2007 survey the top concerns of residents were controlling property taxes, preserving water quality and natural resources. This survey also indicated that other major objectives were to encourage preservation of woodlands, wetlands, open spaces, river corridors and farmland. Residents were also supportive of the idea of wind power, although that is a sensitive subject, along with the growth of home-based business including the sale of agricultural equipment and raising livestock and crops. Listed below is a summary of what Roxbury residents felt were the most pressing issues facing the town in the next ten years, according to the above mentioned survey:

- Groundwater contamination
- Loss of productive farmlands
- Reduction of wildlife habitat
- Elderly transportation
- Rural residential development

2. Purpose

Increasing demands on the resources of Roxbury will make town decisions about planning of critical importance. This Town Plan has been written to guide the town in making those decisions. The Planning Commission is also concerned with what is happening in surrounding towns. Specifically, the Town Plan should be used to:

- A. Provide the framework for planning the future of the town
- B. Guide local decision-making in subdivision, site development plans and conditional use reviews, if and when ordinances regulating such activities are enacted
- C. Serve as a basis for local decision-making during any act 250 review
- D. Provide a framework for revising and enacting Town ordinances
- E. Assist in development of the Town's capital budget
- F. Assist with the formulation of local policies and programs
- G. Serve as a primary resource document for private parties desiring to learn of the town, its goals and policies
- H. Establish policies for the Town's interactions with neighboring towns and other levels of government

3. Authority

Authority to adopt and implement the Town Plan is provided by the Vermont Planning and Development Act, 24 VSA, Chapter 117. The purpose of the Act is to *"encourage the appropriate development of all lands . . . in a manner which will promote the public health, safety, morals, prosperity, comfort, convenience, efficiency, economy, and general welfare; and to provide a means and methods for the municipalities and regions of this state to plan . . . and to implement those plans."* In 1988 the Vermont Legislature revised the state planning statute with the adoption of Act 200 which established a series of goals and objectives and added them to the Purpose of Chapter 117. Roxbury's first Town Plan was written in 1979, and revised in 1984 and 1989. A 1996 rewrite of the town plan was undertaken in order to conform to the twelve planning goals listed in 24 VSA, section 4302 and include the ten required elements listed in section 4382 as required components of a municipal plan. The most recently adopted plan was approved in 2008. Failure to develop and adopt a Town Plan will require the use of the Central Vermont Regional Plan as Roxbury's planning guide. In addition, the lack of a Town Plan will compromise Roxbury's ability to affect development within the town (i.e. will not be able to fully participate in Act 250 projects) as well as development within nearby towns which will impact Roxbury.

4. Citizen Participation

The future of Roxbury will require thoughtful consideration as, according to our 2007 survey, the community expressed a split opinion on the growth of Roxbury with 43% of residents would like Roxbury to grow more, while 43% would like to see the town population remain the same. It is imperative that the future of Roxbury progress in such a way that current residents and future residents can both be pleased with the pattern of growth that could result from ski area

expansions and the pull of the rural lifestyle that many out of state residents relocate to find. It is clear however from previous surveys that if Roxbury is to grow the residents would prefer to see single family homes, cluster housing and elderly housing.

5. Format of the Plan

The Roxbury Town Plan consists of four sections. The first section discusses the Town Plan itself: its authority, purpose and format, along with other relevant background information. The second section gives a brief history of the town. The third section provides a detailed analysis of present issues relating to natural resources, housing, transportation, community facilities, etc. The fourth section contains relevant maps useful for understanding the Plan.

6. Acknowledgements

This Town Plan includes public input gathered through the 2007 Comprehensive Planning Survey and works off the structure of the 2008 Town Plan while integrating the new requirements. The Plan in its current form could not exist without the hard work of both the past and present planning board members and the help of the Central Vermont Regional Planning Commission (CVRPC).

II. A Brief History of Roxbury

The area now known as Roxbury may have once been a permanent home for a Native American tribe; or, it may have been part of a buffer zone between the Iroquois nation to the west (New York) and the Abenaki tribe to the east (Maine). In either case, the early pioneers of European descent and Revolutionary War veterans settled the hillsides first, perhaps because the lower valley lands afforded little natural protection against Native American raids. Despite the difficulties of travel, many Vermont communities, including Roxbury, tended to be organized on a trans-mountain rather than an intra-valley basis.

The following are some highlights of Roxbury history:

- Roxbury was chartered on August 6, 1781 to Benjamin Edwards and sixty-four others, only 20 of which ever lived in the town.
- The first settlers of European descent came to Roxbury in 1789. The first child born here to these settlers was a daughter, Lydia, to Jedediah Huntington.
- The first town meeting was in 1797. At that time, the town was primarily a farming community with sawmills and gristmills being the main industries. After the Civil War, there was a watch manufacturing company that made parts for the Waltham Company.

- Between 1800 and 1860, the town grew from 113 residents to a population of 1060. The school district was founded in 1801 with a total of 64 pupils in 1802.
- The first mail delivery was made in 1826 by four or six horse stage. John Spaulding was the Postmaster, and Guy Edson the carrier.
- In 1838 the Union Congregational Church was organized.
- In 1848, the railroad was built and Roxbury became a major shipping center. The town expanded in both population and industry, and included stockyards in village areas.
- The opening of the quarries in 1857 after the discovery of Verde Antique marble was a great influence in the changing character of the town. The town continued to be a thriving community.
- Ninety-four Roxbury men were called to serve in the Civil War, and twenty-nine were killed.
- Zed Stanton, a life-long Roxbury resident, became Lieutenant Governor in 1902, then Chief Justice of the Vermont Superior Court in 1908. His house, built in 1900, still stands between the school and the post office.
- In 1913 Teela Wocket Camp was started by Claude and Florence Roys. The camp was an exclusive girls' camp, and the daughters of many prominent people from all over the country attended. In 1989 the camp was sold and it became a tennis and soccer camp, operating as Windridge Camp at Teela Wocket. It is still an important part of the town.
- The Roxbury State Fish Hatchery, located at the south end of town, was built in 1891. It still attracts many visitors.
- The Catholic Church was founded in 1919, but closed in the 1970's.
- With the coming of World War II in 1940, and with the closing of the quarries in 1957, the exodus of young people from Roxbury changed the composition of the town. By 1970, the population had dropped to a low of 354, and the town had lost most of its industry and farming. It had become a community of commuters, as it remains today.
- There has been an influx of new people to Roxbury in recent years. By 2010, the population had grown to 691. These new residents have brought with them diversified educational, social and economic backgrounds

III. Inventory, Analysis and Recommendations

1. Physical Features, Natural and Cultural Resources

1.0 Physical Features

A. Setting

Roxbury is the southern-most town in Washington County, and lies in the geographical center of Vermont. It is bordered by the Towns of Northfield, Warren, Granville, Braintree and Brookfield, and contains 25,984 acres (40.6 square miles) of land. The town is unusual in that it contributes to the watersheds of both the St. Lawrence River (via the Dog River), and the Connecticut River (via the Third Branch of the White River).

B. Topography

With elevations ranging from about 880 feet along the Third Branch of the White River to 3,060 feet at the peak of Rice Mountain, Roxbury ranks among the most rugged areas in the region. Steep terrain poses limitations for many types of development due to problems including sewage disposal and soil erosion. With over 20 peaks exceeding 2,000 feet in elevation, the physical characteristics of the town will continue to have a profound effect on its future development.

1.1 Natural Resources

A. Water Resources:

Maintaining or improving surface and groundwater resources is a major concern expressed by Roxbury residents.

1. Surface Water:

The vast majority of the town's surface waters are composed of small, high gradient upland streams serving as headwaters or tributaries of the north-flowing Dog River and the south-flowing Third Branch of the White River. In addition to providing aesthetic and recreational qualities for the community, these streams sustain wild (naturally reproducing) populations of brook, brown and rainbow trout which support recreational fishing opportunities, as well as various non-game fish species. In addition, the Vermont Department of Fish and Wildlife annually stocks Atlantic salmon into the Third Branch of the White River as part of the Connecticut River Atlantic Salmon Restoration Program. Half of Vermont's trout species reside in Roxbury streams. The hatchery is known for being disease free (Source: Northfield Transcript). In the document "How to Include Fish and Wildlife Resources in Town and Regional Planning", the Vermont Department of Fish and Wildlife identifies potential development impacts to aquatic resources such as:

- A. excessive encroachment into shoreline areas
- B. road crossing of streams
- C. pond construction

Maintaining undisturbed naturally vegetated buffer strips along streams provides many functions, including: stabilizing stream banks (by reducing erosion), providing food and shelter for fish and wildlife, filtering and absorbing pollutants (such as silt, fertilizers and livestock wastes) prior to reaching surface waters, maintaining cool water temperatures required to support aquatic life, reduce flood and ice damage to stream banks and adjacent structures, as well as preserving the natural character of the water.

Road crossings of streams with culverts may block fish migration and eliminate viable stream habitat. Roads in close proximity to streams can increase the supply of fine sediments in the streams, thereby reducing habitat quality. Construction of in-stream ponds often have similar impacts, and may degrade water quality downstream by increasing water temperatures.

2. Flood Resilience:

Flooding is Northfield's most common form of natural disaster and the most costly and dangerous to public health and safety according to the Town's Local Hazard Mitigation Plan (2011). Floodplains are important in retaining runoff during high flow periods, thereby reducing floodwater heights and stream velocities. Encroachment by development within floodplains will diminish these functions, increasing the potential for damage to downstream areas. The Federal Insurance Administration has adopted the 100 year flood (i.e. a flood of a size expected to occur statistically once every 100 years) as the basis for floodplain management. Roxbury has, however, experienced floods of greater magnitude. In 1927, a 250 year flood inundated the entire village, flooded a freight train stranded at the Roxbury landing, and damaged or destroyed thirty-five bridges in the town. As recently as 2006/2007, there have been floods that have washed out roads and damaged culverts. The December 2006 event included major flooding of the fish hatchery, home and driveway damage, a cemetery under water and a large section of 12A destroyed.

August 2011 brought Irene to our Town, and many others. Roxbury experienced huge amounts of destruction not only to roads and houses but also to our Town Hall and other Town buildings. While we had massive destruction to deal with we also experienced a will not quite attitude all around town. Were there were detours people found ways through the forest on ATVS to get to those who needed help. Many of our Town office volunteers rallied together to not only save important Town documents from a flooding office but also worked vigilantly to get all of the FEMA paperwork together and to provide updated information on the disaster. Again in 2013 just before our July 4th celebration Roxbury got hit again; more localized this time but causing severe damage to our roads; our festival spirits weren't dampened though, those who could get to Town came down to celebrate in true Roxbury form.

While floods are inevitable, there are many different approaches that can help reduce flood losses in compact historic village centers that are located adjacent to the river, typical of many communities in Vermont, and along the smaller tributaries in the upper reaches of a watershed. More sustainable approaches to development can help Roxbury become more resilient to future flooding by protecting vulnerable undeveloped lands, locating development in safer locations, and designing development so it is less likely to be damaged during flooding.

Roxbury’s Flood Hazard (Inundation) Areas

Local flood hazard areas, including those areas along the Dog River and its tributaries, which have a one percent chance of flooding, are defined on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM). The Town of Roxbury participates in the Federal National Flood Insurance Program (NFIP), which provides flood damage relief to communities which enact ordinances regulating floodplain land use. The Town also has an approved aforementioned Hazard Mitigation Plan in place, a document intended to assist the Town in recognizing hazards facing the community and identifying strategies to begin reducing risks from acknowledged hazards, including floods and flash flooding.

According to the National Flood Insurance Program, there are properties within the Town are located within the designated 100-year floodplain. Based on the results of overlaying the FIRM flood maps with the location of the E911 points, there are 5 structures in the 100 year floodplain. As of September 2013, Roxbury has 4 flood insurance policies through the NFIP covering approximately \$283,900 in value.

Irene Relief & Recovery Funds administered to Roxbury

Program	Subtotal	Total
Individuals and Households Program		\$256,425
Housing Assistance	\$250,461	
Other Needs	\$5,964	
Public Assistance		\$1,680,117
Hazard Mitigation Grant Program		\$0
National Flood Insurance		\$54,173
Total		\$1,990,715

As previous events have made clear, even areas beyond the NFIP designated 100-year floodplain may be vulnerable to these types of hazards. Channel adjustments with devastating consequences have frequently been documented wherein such adjustments are linked to historical channel

management activities, floodplain encroachments, adjacent land use practices and/or changes in watershed hydrology associated with conversion of land cover and drainage activities, within and beyond the NFIP floodplain. The Town Garage, for example, is located on the edge of the floodplain and was almost flooded during the March 2011 flood event. In the wake of Tropical Storm Irene, FEMA administered \$1,990,715 in Irene Relief and Recovery Funds to the residents and the Town of Roxbury.

Roxbury's Fluvial Erosion Hazard Areas

Flooding, including flash flooding after major storms, may also occur on land outside of mapped flood plains, including upland streams. *Fluvial erosion* is erosion caused by rivers and streams, and can range from gradual bank erosion to catastrophic changes in river channel location and dimension during flood events. The state has recently created a map of Fluvial Erosion Hazard areas to help the town identify those areas at risk of flood damage that may not be included on the FEMA FIRM. Stream setbacks, buffers, and storm water management requirements under local regulations can help reduce flood hazards in both FIRM and FEH areas.

As of a 2009 analysis by CVRPC, there are 28 properties wholly or partially located in the fluvial hazard zone. Fluvial Erosion Hazard overlay districts are one of the best avoidance strategies for fluvial erosion hazard mitigation. An overlay district is an additional zoning requirement placed on a specific geographic area (in this case the FEH zone) without changing the underlying zoning.

River Corridor Protection

The Dog River starts in Roxbury and flows north to converge with the Winooski River in Montpelier. The Dog River provides the greatest threat of flooding in Roxbury as it flows through the center of town and along the railroad tracks. A corridor plan of the Dog River was developed in 2008 and identified problem areas, assessed river conditions and provided ideas for future restoration and mitigation projects. A map of project locations and table of descriptions are attached at the end of the Local Hazard Mitigation Plan, along with a map of current fluvial erosion conditions. The fluvial erosion map indicates areas where the river banks in Roxbury have “high” to “extreme” rates of movement and are likely to change in shape in size. Development in areas of high fluvial erosion can lead to increased and more extreme flooding events, along with greater and more costly damages.

Overall, the corridor plan identified the stretches of the Dog River in Roxbury as in “fair” condition. The “fair” rating was assigned due to several factors which degrade the River’s health:

- Railroad beds and banks along the River cut off access to natural floodplain
- Inadequate riparian buffers (<25 ft)
- Higher rates of erosion in residential areas due to increased stormwater runoff
- Channelization
- Floodplain encroachment
- Bridge span inadequate and too constricting
- Fluvial erosion

The report also identified bridges which are constricting the river at bends. Structures over bends are more likely to cause flooding due to the fact that the velocity of the water is higher and banks are more susceptible to erosion. The corridor plan recommends a widening project of moderate priority for one rail bridge on river segment M21 in Roxbury, in addition to the projects listed at the end of the plan. Additional bridges which are of lower priority are located on Roxbury Rd and Warren Mtn. Rd. The Town should consider prioritizing and pursuing funding to implement these projects.

The Whole Watershed

Communities that wish to become more resilient to future floods can also implement policies to more effectively manage stormwater throughout the entire watershed. Adopting these policies can help slow stormwater, spread it out over a larger area, and allow it to sink into the ground rather than running off into nearby streams and rivers. Policies that support this goal under consideration in Northfield include adopting stormwater management regulations that include green infrastructure techniques, adopting tree protection measures, adopting steep slope development regulations and adoption riparian and wetland buffer requirements. Riparian buffers are an integral part of river corridors. In addition to reducing flood hazards and stabilizing stream banks, naturally vegetated riparian buffers provide a number of important environmental functions and values including flood attenuation, aquatic and terrestrial habitat, creating wildlife corridors, filtering runoff and adsorbing nutrients, shading streams to keep them cool, and more.

Emergency Response Planning

Currently Roxbury has a Basic Emergency Operations Plan that identifies responsibilities during a local emergency. *In preparation for and in response to flood events* The Town of Roxbury, as noted above, participates in the National Flood Insurance Program (NFIP) and a Hazard Mitigation Plan in place. These documents help the Town in recognizing hazards facing the community and identifying strategies to begin reducing risks from acknowledged hazards, including floods and flash flooding.

3. Groundwater:

Groundwater is largely derived from precipitation which has infiltrated and percolated through the soil. Roxbury is presently and will likely continue to be totally dependent upon groundwater sources (e.g. springs, shallow and deep wells) for its domestic water supply. Therefore, the protection of both the *quality* and *quantity* of these resources is critical to the future of the town and its residents. Groundwater quality may be impacted directly from development activities which contribute various pollutants, e.g. landfill leachate, gas/oil leaks, sewage and industrial wastes. The quantity of water that recharges groundwater sources can also be diminished by increases in impervious lands such as parking lots, roads and buildings. The Town of Roxbury has adopted a Sewage Ordinance to prevent water contamination by insuring adequate sewage disposal systems. Since 1991, 102 permits have been issued for new or renovated construction.

As of July 1, 2007, the state criteria for septic design will be the standard used by the town.

In addition to private residences, the Roxbury Village School is served by a groundwater source. A "Wellhead Protection Area" has been designated by the Vermont Department of Environmental Conservation to assist with the protection of this community water source. Future consideration of additional public water sources will also have to include such protection measures.

4. Wetlands:

Wetlands, commonly thought of as bogs, swamps and marshes, are defined in 10 V.S.A. section 902 as "those areas of the state that are inundated by surface or groundwater with a frequency sufficient to support significant vegetation or aquatic life that depend on saturated or seasonally saturated soil conditions for growth and reproduction." See our natural resources map. Wetlands provide many functions including: storage for flood waters and storm runoff; surface and groundwater protection; erosion control; fish and wildlife habitat; threatened and endangered species habitat; as well as serving as educational, aesthetic and recreational resources. Wetlands deemed "significant" are protected by state and federal regulations.

In addition, 24 V.S.A. § 4409 (c)(2)(A) requires all municipalities to give the Vermont Department of Environmental Conservation a 30-day comment period prior to issuing any zoning permit for the development of a wetland. Wetlands in Roxbury are identified on the Natural Resources map.

Roxbury has been the victim of a growing wetland, (see Natural Resources Map), in the village/north of the village area. The impact has been serious and the state has stepped in to affect a solution. The State spent about \$200,000 to remediate the problem; the Town is required to maintain the improved wetland situation. Much of the standing water in Roxbury is in the form of shallow wetlands. Some of these wetlands are maintained and expanded by resident beaver populations. Beaver have contributed to raising water levels in wetlands surrounding Roxbury village. Water has risen to the point of flooding some basements this situation has prompted intervention by town and state to manage the beaver population, thereby reducing impacts to homes and other structures.

B. Land Resources:

1. Soils:

Soil characteristics, including permeability and depth to seasonal high water and bedrock, will greatly influence its ability to support agriculture or development. The majority of Roxbury's soils are shallow, acidic, and with hardpan or bedrock within three feet of the surface. These characteristics are more suited for forest production than development or agriculture. While the soils along the town's rivers and streams are

generally more suited for agriculture or development, drainage and/or flooding problems may limit these activities. See our current use map.

2. Forests:

Over 85% of Roxbury's land surface is presently forested. This includes two large tracts of state forest totaling about 5,500 acres (Land Use map), and over **7,000 acres** of private and corporate land enrolled in Vermont's Use Value program for timber management. Besides providing important natural resources (e.g. wildlife habitat, surface and groundwater protection) and aesthetic and recreational opportunities (hiking, hunting, cross-country skiing, snowmobiling), Roxbury's forests provide important sources of lumber and cordwood. Several Roxbury residents earn their living in forestry or related fields, while approximately 25% of Roxbury residents heat their homes with wood. On the 2007 community survey, residents expressed support for appropriate timber management within Roxbury's forests.

3. Mineral Resources:

While the mining of Verde Antique marble and talc were historically important in Roxbury, more recent activities have focused on sand and gravel resources. At present, one commercial sand and gravel extraction is operated in Roxbury. It is important to carefully consider both environmental and social consequences of future mining activities. See our Natural Resources map.

C. Wildlife:

1. Habitat Fragmentation:

Many wildlife species, including moose, deer, black bear, coyote, bobcat and various songbirds, require large wooded habitats. These large habitat areas are further enhanced when interconnected by wooded stream corridors. At the present time, Roxbury is fortunate to maintain large tracts of forest which support these and other wildlife species. Poorly planned development may, however, unnecessarily dissect these habitats, diminishing their wildlife value.

2. Deer Wintering Areas:

Deer annually migrate to areas which provide protection from harsh winter conditions. These areas are generally found in moderate elevations and are characterized by a southern or western exposure containing stands of softwoods, and are subject to minimal human disturbance during the winter. These wintering areas or "deer yards" may provide shelter for deer from large areas and are often used for generations. Development within or adjacent to these wintering areas ultimately decreases the ability of the land to support deer. Deer wintering areas which have been identified in Roxbury are generally located along stream corridors as shown on the Natural Resources map.

3. Rare and Endangered Species:

The Vermont Nongame and Natural Heritage Program (NNHP) of the Department of Fish and Wildlife maintains a database of rare, threatened and endangered plants and animals, and significant natural communities for the state. The general location of those resources most recently identified is presented on the Natural Resources map.

1.2 Cultural Resources

1. Agricultural Resources

Although the rugged topography of the town is not commonly associated with agriculture, Roxbury does contain some good farm soils, particularly in stream and river valleys. Both vegetable and flower farming are livelihoods for several town residents. See our Current Land Use Map.

2. Historic Resources

Roxbury contains numerous historic sites and structures including many private residences, several school houses, the Town Hall, two churches (one acting as a church and the other converted to a woodworking shop), several cemeteries (including First Settlers, Orcutt, West Hill, Village, East Roxbury and Roxbury Flats) and the first state fish hatchery, which was established in 1891. See our Town overview Map.

3. Scenic Resources

Due to its rural nature and rugged topography, Roxbury offers many scenic vistas and ridgelines, and the town contains many backcountry ponds, small mountain streams and waterfalls. In addition to many scenic back roads, primary roads of special note are Routes 12 and 12A and the Warren Mountain Road which are included in the region's fall foliage and bicycle tours.

4. Public Outdoor Recreation Areas

The rural nature of Roxbury lends itself to many types of outdoor activity. The Roxbury State Forest provides many recreational opportunities for the public including hiking, picnicking, primitive camping, hunting, fishing, and cross-country skiing. In addition to those found on state owned lands, many outdoor recreational opportunities exist in town. Roxbury's back roads provide excellent biking, hiking and horseback riding opportunities. The small streams in town offer fishing opportunities as well as a place to cool off in the summer. In winter, the Vermont Association of Snow Travelers (VAST) maintains a network of trails which is used for snowmobiling as well as cross-country skiing. In 1999, the Roxbury Land Conservation Association established Roxbury's first park. The Third Branch Conservation Park is on the banks of Third Branch of the White River across from the Roxbury State Forest.

1.3 Recommendations

Goal: Maintain, preserve and enhance Roxbury's natural and cultural resources.

Objective 1: Protect or enhance the quality of Roxbury's surface and groundwater resources.

- A. Encourage the maintenance of undisturbed, naturally vegetated buffer strips along stream corridors and significant wetlands.
- B. Encourage construction, road maintenance, forestry and agricultural practices which follow state approved guidelines for protecting water quality (e.g. logging/agriculture Approved Management Plans). Ways should be explored to implement best practices for gravel conservation (Agency of Natural Resources – River Mgmt).
- C. Strictly enforce state requirements for sewage treatment by informing the state when there is divergence from its rules.
- D. Carefully designate and enforce wellhead protection areas for present and future public water supplies.
- E. Carefully regulate future development within designated flood hazard areas.
- F. Carefully regulate any future activities which contribute or introduce various pollutants.

Objective 2: Promote the responsible and efficient use of Roxbury's land resources (forests, agricultural and mineral) to ensure their sustained use, compatibility with surrounding land uses and aesthetics, and the protection of natural resources.

- A. Encourage the development of forest management plans for state and private forests which provide for sustainable use and protection of natural resources.
- B. Strongly discourage large-scale clear cutting of private and state-owned forests.
- C. Promote the maintenance of large tracts of interconnected forestland through creative land use planning
- D. Protect critical wildlife habitat (deer wintering areas, rare and endangered species. etc.) See our Natural Resources Map.
- E. Encourage landowner participation in private conservation programs (Forest Legacy Program, Current Use, Vermont Land Trust) to protect the town's land resources
- F. Prohibit development about 1800 feet above sea level and on land that has more than a 25 degree slope (See section on Land Use). This could be done by the Select Board creating an ordinance
- G. Minimize social and environmental impacts from any future earth extraction operations through careful consideration of location and timing. Allow mining only during normal business hours and do not allow mining that would affect water quality. Require proper restoration of future mining sites. This would be accomplished by adoption of a earth extraction Ordinance, or through Act 250.

Objective 3: Protect and enhance Roxbury's cultural resources

- A. Encourage continued or expanded use of suitable lands for agricultural activity consistent with objectives 1 and 2 above
- B. Develop an inventory of Roxbury's historic, recreational and scenic resources and investigate potential mechanisms for future protection (e.g. AOT VT scenic byways, historic sites registry.) The Ancient Roads committee has been working on documenting a great deal of this information.
- C. Investigate specific needs and investigate the feasibility of developing additional outdoor recreational opportunities within the town.

Goal: To protect life and property from natural disasters, including flooding and flash flood events.

Objective 1: New development in identified flood hazard, fluvial erosion, and river corridor protection areas is avoided. If new development is to be built in such areas, it does not exacerbate flooding and fluvial erosion.

- A. Replacement and upgrade of priority culverts and bridges identified in 2011 Local Hazard Mitigation Plan.
- B. Explore possible strategies to flood-proof the Town Garage
- C. Prepare and distribute or make available NFIP insurance and building codes, explanatory pamphlets or booklets

Objective 2: The protection and restoration of floodplains and upland forested areas that attenuate and moderate flooding and fluvial erosion is encouraged.

- A. Identify possible areas susceptible to flood hazards that could be preserved as open space to maintain their ability to store floodwaters during future events.

Objective 3: Flood emergency preparedness and response planning is encouraged

- A. Develop a post flood clean-up, decontamination and recovery plan/procedure

2. Demographics

2.0 Overview

As discussed in the Town History section of this Plan, the all-time high population level of Roxbury was 1,060 in the year 1860. When the boom years were over, the number of residents steadily declined until it reached a low of 354 in 1970. Since then, however, population has been rising rapidly, rebounded to 576 by 2000, and continued to grow over the next ten years reaching 691 in 2010. The following table illustrates this growth in comparison to the rest of the county and state, and offers a projected population for Roxbury as it enters the next century.

Table 2.0.1
Population Growth 1980-2020

Year	Roxbury	Washington County	Vermont
1980	452	52,895	511,456
1990	575	54,928	562,758
2000	576	58,039	608,827
2005	606	59,478	623,050
2010	691	59,534	625,741
2020	703	61,322	666,041

Sources: 1990, 2000, 2010 U.S. Census; Vermont Department of Health; Central Vermont Regional Planning Commission; Economic & Policy Resources

Table 2.0.2
Population Density (persons/square mile)

	1990	2000	% change	2010	% change
Roxbury	13.9	13.8	- .7%	17.01	+ 23.2%
Washington County	77.6	84.2	+ 8.5%	85.6	+ 1.66%
Vermont	60.9	65.9	+ 8.2%	67.6	+ 2.57%

Source: Extrapolated from 1990, 2000, 2010 U.S. Census

2.1 Population Profile:

Much of Roxbury's recent population growth has occurred in the 45-65 year old categories. As *Table 2.1.1* indicates, the one area of population decline in Roxbury is among its youngest age categories (0 - 14 years). This often comes up for conversation; what will Roxbury do as its population ages? We are lucky to have such faithful volunteers and a wonderful village school but with the graduation from RVS many of our younger citizens become active members in the Town in which they attend school. Or perhaps the requirement of commuting to work daily, in sometimes severe conditions is enough of a deterrent. Whatever the cause is Roxbury, and Vermont as a whole, are experiencing a drought of young people. While Roxbury cannot “solve” this population reality, we continue to be a fun and energetic community and hope that our positive attitude and ample scenery and outdoor activities will call to others as it has called to us. We are also aware of the difficulty of aging in place. We are lucky to have such

willing and able caregivers in the area who travel from home to home on a case by case basis; Meals on Wheels also provides delivery of warm meals to seniors in need. Of course there is also the senior/community center which provides weekly lunch for those who aren't home bound and want to check in with their neighbors.

Table 2.1.1
Age Distribution – Roxbury 1990, 2000 & 2010

	1990		2000		2010	
	Number	Percent	Number	Percent	Number	Percent
0-14 Years	114	25%	110	19.1%	97	15%
15-24 Years	37	8%	63	10.9%	59	9%
25-44 Years	107	24%	170	29.5%	157	25%
45-64 Years	132	29%	179	31.1%	238	38%
65 Years & Over	61	11%	54	9.3%	83	13%

Source: 1990, 2000, 2010 U.S. Census

Roxbury is socially and economically diverse. Census statistics show that the town has unusually high percentages of both highly educated and minimally educated people (see *Table 2.1.2*), as well as a mixture of occupation categories among its employed workforce. Despite low median income levels, Roxbury has at least a smattering of households in almost all of the U.S. Census household income categories (ranging from under \$5,000 to over \$150,000 per year). The Town's recent diversification is further illustrated by the fact that in 1980, native born Vermonters comprised 68% of Roxbury's population and by 1990 this figure had dropped to 60%, 62.5% in 2000 to a modern low in 2010 at 41%. Roxbury's statistics are changing in part because of a population that is mobile.

Table 2.1.2

Education Level Achieved for Persons 4 + Years College – 2010

	K-8 Grade	9-11 Grade	High School Graduate	1-3 Years college	4 + Years College
# of Persons	32	1	123	29	60
% of Total Persons 2010	4.6%	.14%	17.8%	4.19%	8.68%
% of Total Persons 2000	4.9%	11.7%	33.5%	22.1%	27.8%

Source: 2010 U.S. Census

3.0 Economic Development:

Roxbury displays several statistics which reflect some degree of economic distress. Fortunately, these are counterbalanced, to some extent, by statistics which reveal a relatively low cost of living, at least with respect to housing. *Table 3.0.1* shows that the 2000 median income of Roxbury families was \$7,075 less than the average Washington County household and \$17, 996 less in 2010. The graph also points out that while Washington County’s income grew steadily over the last decade, Roxbury’s has been unstable. These numbers are also a reflection of the recent recession and the slow recovery that has followed. This table outlines the gap between Roxbury and other towns.

Table 3.0.1

Median Family Income 2000, 2005, 2010

	2000	2005	2010
Roxbury	\$44,000	\$46,352	\$39,167
Washington Co.	\$51,075	\$55,240	\$57,163

Source: 2000, 2010 U.S. Census

Census data also shows that the percentage of persons in town living below the poverty level has fallen, so that it is lower than the state average (*Table 3.0.2*).

Table 3.0.2

**Persons below Poverty Level - 1990, 2000, 2010
(Percentage of Total Population)**

	1990		2000		2010	
Roxbury	66	11%	52	9.1%	82	11.9%
Vermont	53,369	9%	57,779	9.4%	56,316	9%

Source: 2000, 2010 U.S. Census

The picture painted by the above statistics is brightened by the relatively low cost of housing in town: an average single family home in Roxbury costs about 10% less than the average Washington County home. The average cost of renting a home is also less than in the rest of the region. See table 4.1.1

3.1 Roxbury's Occupational Profile

In earlier times, Roxbury's economy was based largely on its natural resources. Until the latter half of this century, mining, forestry, and farming were the economic mainstays and most people earned their living in town. Now, with only 23.1% of Roxbury's employed residents working in town, Roxbury has evolved into a "bedroom community".

Table 3.1.1

Place of Work

	Roxbury 2010	Region 2010	State 2010
Resident Workforce	230	22,487	222,049
Jobs Within Community	54	21,848	206,338
% Local Jobs Held by Non-Residents	41.9%	44.0%	51.3%
% Residents Working Outside Community	76.9%	70.0%	54.8%

Source: 2010 U.S. Census:

One difference between Roxbury and most other towns that fall into the "bedroom community" category is that it maintains a relatively strong resource based economy with over twice the state average for percentage of agricultural, mining and forestry jobs among its labor force (see *Table 2.3.2*). (As compared to other towns in the region, Roxbury also has a high percentage of self-employed individuals in its work force; most are working in the above mentioned categories.) Roxbury is blessed with a wide access to broadband (DSL). With smart phones becoming more and more common, even in Roxbury, residents can take their connection with them everywhere, making being self employed a more realistic goal.

Table 3.1.2
Employment by Occupation and Industry – 2010

	Roxbury	Vermont
Management, professional, and related occupations	29.2%	39.7%
Service occupations	22.9%	17%
Sales and office occupations	13.6%	22.2%
Construction, extraction, and maintenance occupations	10.6%	7.7%
Production, transportation, and material moving occupations	19.1%	3.7%
Agriculture, forestry, fishing, and hunting	3.4%	2.6%
Manufacturing	16.1%	10.6%
Public administration	11%	4.9%

Source: 2010 U.S. Census

3.2 Recommendations

Goal: Accommodate a reasonable rate of population growth in Roxbury.

Objective 1. Attempt to maintain a moderate annual population growth rate for the next five years in order for the town to accommodate needs for housing and economic opportunity.

Assessment: According to the census data Roxbury continues to slowly grow.

Objective 2. Discourage growth and development which would overburden town services and facilities or adversely impact the town's rural character. See Land Use section for further discussion.

4. Housing:

4.0 Stock and Trend:

In 2008, the Central Vermont Regional Plan adopted a Housing Distribution Plan as part of its Regional Plan. CVRPC's Housing Committee developed the Plan to encourage the

development of more meaningful and practical local housing plans and to promote the sustainable and efficient distribution of housing region-wide. It was formulated with the aim of ensuring that all towns continue to contribute similar percentages of the Regions total housing in the future as they did in the year 2000. By doing so, it is hoped that the burdens and benefits of providing housing can be balanced among Central Vermont communities and sprawling, inefficient patterns of growth can be curtailed.

Table 4.0.1
Roxbury Housing Distribution

2000-04	2005-09	2010-14	2015-20	Total
13	15	25	36	89

CVRPC Regional Plan

The Distribution Plan allocates 29 new housing units to Roxbury over the next six years (2014-2020). This anticipated increase in development should not put undo strain on the Town, however it is important to note that development should be localized to already built-up areas as illustrated on our current use map.

It is important to emphasize that CVRPC views the Town’s response to the Distribution Plan as a planning exercise. According to CVRPC: *“The projected housing demand numbers are not quotas or targets and we will not be requiring **implementation**. We are most interested in knowing that municipalities are cognizant of where housing growth is currently occurring, and thinking about where it should occur in the future, in their respective communities.”* As such, it makes sense for the Town to plan for this growth, however small, as the housing market is subject to change and such growth is likely to come eventually.

Until recently, the greatest density of housing in Roxbury was largely confined to the village area, with a church, school, town hall, general store, library and post office providing the town center. However, the trend is now toward development in the more rural landscape along our maintained road system. The number of housing units has greatly increased during the past twenty years. In 1970, there were 188 units; by 1990, that figure had jumped to 338 units and jumped again in 2010 to 441. The number of households is increasing at twice the rate of other towns in our region, while household size has leveled off. There are 441 total housing units in Roxbury, all of which are located in a rural area. 300 of these housing units are currently occupied, 118 are vacation/seasonal, while 23 are for sale/lease or vacant.

The availability, cost, and location of housing within our community affects land use, land value, employment and transportation, as well as the social and economic mix and vitality in our community. Roxbury’s homes come in a large variety of sizes, shapes, conditions, and ages. Roxbury does recognize that a full range of housing alternatives must be available to ensure that it remains a socially diverse and economically viable

community. It is also recognized that it is a difficult challenge for the town to ensure an adequate supply of decent and affordable housing.

The federal government defines housing as affordable when a household with a income at or below the county median pays no more than 30% of its gross income on housing costs. In 2010, the median household income in Washington County was \$55,313 with median home value at 205,410 (27%); while in Roxbury the median income was 38,594 with a median home value of 136,500 (28%).

Many of the factors that affect the affordability of housing are beyond the control of the town government however there are some that can be addressed. The main issues of concern to Roxbury’s residents are that of quality housing should be available to people of all incomes and all age groups and family types. This includes affordable housing for both homeowners and renters, the existence (and improvement) of sub-standard and other housing in poor condition, and the lack of housing for the elderly.

Table 4.0.1

Housing Units – vacant and occupied

The following tables illustrate the growth of housing and household size in Roxbury as compared to the surrounding region:

	1990	2000	2010
Roxbury	207	227	441
Wash. Co.	22,948	23,659	29,941

Source: Economic & Policy Resources, 2010 census

Table 4.0.2

Households & Household Size (occupants) - 2005, 2010, 2015

	2005		2010		Projected change 2015	
	#	Avg. Household Sizes	#	Avg. Household Sizes	#	Avg. Household Sizes
Roxbury	240	2.53	255	2.35	280	2.39
Region	26,4879	2.43	29941	2.43	30,622	2.28

Source: 2000, 2010 U.S. Census

Table 4.0.3

Housing Unit Categories – 2000 & 2010

Housing Type	# of Units 2000	# of Units 2010	% Changes from 2000
Owner Occupied	222	300	+ 35%
Vacation/Seasonal	151	118	- 28%
Vacant, For Sale or Lease, Other	28	23	- 22%
Total Units	401	441	+15.7%

Source: 2000, 2010 U.S. Census

The following tables detail characteristics of and facilities in housing units in Roxbury according to data from the 2010 U.S. Census. A few housing units are now served by the water system recently constructed in conjunction with the expansion of the Roxbury Village School.

Table 4.0.4

House Size (# of Rooms)		Home Facilities	
1 Room	12	All Facilities	58
2 Rooms	18	No Kitchen	3
3 Rooms	30	No Plumbing	51
4 Rooms	84	No Electricity	2*
5 Rooms	72	Oil, kerosene, alcohol	131
6 rooms	66	Wood	87
7 Rooms	57	Propane	23
8 Rooms or more	33	Solar, electric, other	1

Sources: 2010 U.S. Census; could not find census data on water sources or waste.

* Experience reveals inaccurate census data in these areas. Actual figures are higher.

4.1 Cost and Affordability

Using the standard definition of "affordability" (i.e. total housing costs consuming no more than 30% of household income), it appears that the average family in Roxbury can afford the average house or apartment in Roxbury (in fact, the median of monthly owner costs for Roxbury is only 21% of household income). Some of this *seemingly* low cost of living may stem from the high percentage of seasonal housing in town and from the inferior conditions of housing (20% of Roxbury's units lack complete plumbing vs. 2% for Washington County).

Table 4.1.1

Comparison of Income and Housing Value – 1990, 2000, 2010

	2000 Median Home Value	2000 Median Income	2010 Median Home Value	2010 Median Income
Roxbury	\$64,000	\$44,000	\$136,500	\$38,594
Washington County	\$86,522	\$51,075	\$205,410	\$55,313

Source: 2010 U.S. Census

Table 4.1.2

Comparison of Median Home Value and Rental Cost for Region – 2010

	Home Value (Median)	Rental Cost (Median)
Roxbury	\$136,500	\$928
Northfield	\$173,600	\$1080
Warren	\$255,300	\$1141

Source: 2010 U.S. Census

4.2 Recommendations

Goal: Ensure safe, affordable and environmentally responsible housing.

Objective 1. Achieve greater design flexibility and economies of scale in the development of particular land areas within the community.

Objective 2. A Roxbury community could work with a developer in advance, in order to indicate the areas it feels are appropriate for mixed-use and more intense development. See our current land use map for an outline of "built up" areas.

Objective 3. Support the creation of new housing and the preservation of existing housing for moderate, low income and elderly households. This housing should be safe, affordable and consistent with current land use.

Objective 4. Also provide the opportunity to achieve flexibility in architectural design, a mix of compatible land uses as well as the preservation of key natural or historic features.

Objective 5. Investigate the creation of elderly housing.

Objective 6. Appoint at least one person with particular interest and skills in affordable housing issues to the Planning Commission.

Assesment: The chair of the Planning Commission has a Masters in Architecture with past involvement in the design of affordable homes and co-housing.

Objective 7. Adopt measures to encourage provision of moderate and low income housing in all appropriate areas of Roxbury

Objective 8. Encourage surrounding towns to make provision for low income housing. Of specific concern is increased development of the Sugarbush ski area resulting in a proliferation of low wage jobs without the accompanying low cost housing stock in the towns of Warren, Waitsfield and Fayston. This could necessitate workers living in neighboring towns with lower housing costs (such as Roxbury), thereby increasing burden on public services.

5. Transportation

5.0 Overview

With today's mobile society, a working and up-to-date transportation network should accommodate the increased population and travel patterns of its community. Unlike many of Vermont's towns, Roxbury has the potential for interfacing three modes of travel: bus, car/truck and rail. The GMTA bus route has pick ups as close as Northfield Monday – Friday, it is even timed appropriately to connect with transfers to points North and south. The train is another great option, with boarding opportunities in Montpelier and Randolph.

5.1 Rail

At the present time, the New England Central Railroad is active with freight service passing through Roxbury. Amtrak passenger service to St. Albans and points south passes twice a day. Neither service makes a stop in Roxbury. A rail siding currently exists in the village. The potential exists for additional rail sidings elsewhere in town.

In years past, there had been passenger service to Roxbury. Today, Amtrak passenger stations are located 15 miles north at Montpelier Junction and 15 miles south at Randolph. Although future Amtrak service to Roxbury is very doubtful, it is conceivable that a passenger car commuter or other service to central Vermont could stop at Roxbury at some point in the future.

5.2 Transportation Services:

Through their Community Wheels program, Central Vermont Transportation Association (CVTA) and the Central Vermont Council on Aging (CVCOA) provide door-to-door services to banks, drugstores, medical offices, etc., by van, bus, taxi and volunteer driver. CVTA also provides bus service one day per week from Roxbury to the Montpelier/Barre area. Human service organizations provide or arrange transportation for their clients. In addition, CVTA Wheels is the Roxbury connection for the Vermont Ride Share Program, a statewide network providing free carpool matching. Roxbury provides a park and ride area but as many service industry jobs don't always overlap for ride sharing the lot does not get as much use as we would like. It is utilized though, and those who use it do appreciate it.

5.3 Highways:

While rail, vanpooling and bus transportation are part of Roxbury's transportation network, the highway network demands the majority of attention and funding.

The Vermont Agency of Transportation lists a total of 50.198 miles for state and town systems. A breakdown of their classification is shown in the following table.

Table 5.3.1
2010 Road Highway Mileage

CLASS	MILEAGE
Lane Highway	0.00
Class 1	0.00
Class 2	3.080
Class 3	31.720
Class 4 (not included in total)	10.080
Legal Trail	0.00
State Highway	7.699
Total Highway Miles in Roxbury	42.99 miles

2010 Results gathered from VAOT website - <http://www.aot.state.vt.us>

Class 2 Highways: The only class 2 highway in Roxbury is the Warren Mountain Road. This road has seen a dramatic increase in use in recent years, primarily from through-traffic to the Mad River Valley and the ski areas located there. This causes somewhat of a hardship to Roxbury, due to increased demand for winter maintenance. Over the years, paving this road has been suggested, as has the possibility of the state taking it over. Careful study of all the issues surrounding any change in the status of this road is absolutely necessary. It would seem that the villages of Roxbury and Warren would have to agree on any change in status.

Class 3 Highways: These are the highways principally traveled throughout Roxbury. From a town perspective, these are our "collector" roads to the state highway system. Roxbury's Selectboard has maintained a good class 3 highway system that serves the town's residents well.

Class 4 Highways: Class 4 highways in Roxbury are classified as 4a, 4b and 4c. This classification system was developed by the Selectboard to determine different maintenance programs for various class 4 highways. The current written policy is as follows:

Class 4 roads: particularly class 4b and 4c, provide the public with an excellent system of trails and greenways that are used extensively by hikers, bicyclists, cross-country skiers and snowmobilers.

Class 4a: Roads with year round residents which receive summer and winter maintenance as road crew time permits.

Class 4b: Roads which receive limited summer maintenance and no winter maintenance.

Class 4c: Roads which are basically a right-of-way that is open to public use but receives no maintenance.

5.4 Bike Paths and Pedestrian Ways

Demand for bike paths and pedestrian ways will probably never be great enough to justify any great expenditure by the town as an extension of its transportation network. There may, however, be justification for these expenditures as a means of providing for some of the recreation needs for the town. Existing class 4 roads make great hiking and mountain biking trails. Some consideration should be given to providing maps and other information as may be required to promote this use.

5.5 Recommendations

Goal: Ensure safe and dependable roadways for the residents of Roxbury at a reasonable cost.

Objective 1. Stabilize the limited upgrading and reclassification of class 4 roads; proportion time and funds accordingly and develop a scheduled maintenance plan. Develop and adhere to a consistent policy.

Objective 2. Continue to upgrade and improve the serviceability of the class 3 road network by scheduled surface grading, and construct and improve drainage facilities as required.

Objective 3. Investigate the need for developing regulations for new roads and bridges that don't come under State jurisdiction.

Objective 4. Discourage road growth especially in any steep or hard-to-maintain areas.

Objective 5. Explore possible expansion of cooperation with other towns for best use of resources in road maintenance and plowing.

Goal. Cooperate with State agencies and utilities as regards road and railway development and maintenance.

Objective 1. The Selectboard should ensure that road construction and improvements provide protection to the town's natural and scenic resources, as specified in Town Plan section 3.1.

Objective 2. Establish a working relationship with New England Central Railroad in their maintenance of track-bed, etc., and explore possible use of the rails for future commercial activities.

Objective 3. State Transportation Department construction, reconstruction or alternate proposals to Routes 12 and 12A in Roxbury should not alter, without careful consideration, the physical and economical make-up of the village areas.

Objective 4. Adhere to the town's and region's commitments to maintain scenic highways as expressed in this Town Plan and in the Central Vermont Regional Plan.

Goal : Develop alternate forms of transportation in Roxbury.

Objective 1. Take action as may be necessary to promote the use of the railroad for commuter service.

Objective 2. Encourage the State to add a shoulder for bikes on 12A.

6. Community Utilities, Facilities and Services

6.0 Education:

The Roxbury Village School, located in the center of Roxbury, educates students in kindergarten through grade 6 in multi-age classrooms. The Roxbury Village School and the schools of Northfield make up the Washington South Supervisory Union. The Roxbury Town School District provides tuition for students in grades 7 through 12 to attend schools approved by the Vermont State Board of Education (including vocational/technical high schools), in accordance with state law and defined criteria. Randolph has vocational/technical schools as well as secondary education classes. Of course as adults we can travel as far as we are willing or have time for to reach any of the many classes our colleges offer to the public.

The Roxbury Village School's mission statement, "working together to ensure each child continues to grow toward his/her potential," and value statements serve as the basis for developing student-centered educational programs. The value statements include: respect and appreciation for self and others; skills for acquiring knowledge (learning to learn); partnership of students, family and community coming together to further develop intellectual, social and personal growth; and a nurturing environment of trust,

caring and affirmation. Roxbury Village School reconfigured its classrooms in 2006/2007 to meet the needs of their students. The configuration is Pre-K & K, 1st Grade, 2nd Grade, 3rd & 4th Grade and 5th & 6th Grade. Roxbury Village School enrollment for 2011/2012 school year was 37 students.

A. Enrollment and School Capacity

1. Past Trends:

Due to increasing school population and overcrowding, the Roxbury Village School was renovated and expanded in 1980, providing three classrooms connected to the Town Hall. A new artesian well was also drilled. In 1990, Roxbury citizens voted for and construction was completed on a second school addition with an updated sewage disposal system. The playground was expanded, re-graded and re-seeded. In 1999, a new playground was constructed by town volunteers, with money raised by the parents and other town citizens. With two new classrooms, the Town Hall was again available for other uses. The addition also provided office space, a library and a resource room for students to receive remedial help.

2. Current Trends and Future Projections:

Currently the Roxbury Village School provides adequate space for its students. However, accurate projections for future enrollment are difficult to determine. There is some fluctuation in the school population each year. One factor affecting the population of the town has been health of the local and regional economies and the resulting job opportunities.

Table 6.0.1

Roxbury Elementary School

	2008/2009	2009/2010	2010/2011	2011/2012
Total Enrollment	50	49	45	37
Attendance Rate	94.40%	92.40%	92.27%	N/AV
Eligible Special Education	19.7%	13.4%	10%	13%
Home Study	2	4		
Student Teacher Ratio	12.1	13.1	6.17	
Average Class Size	13	15		
Internet Access	Yes	Yes	Yes	Yes

	2008/2009	2009/2010	2010/2011	2011/2012
Type of Internet Connect	DSL	DSL	DSL	DSL
Teachers	8.1	5.3	5	
Other Teachers	.5	.7	7	
Instructional Aids	3.5	2	1	
Administrative Support	1	1	1	1

School Report 2012 & 2013

Table 6.0.2

Roxbury Elementary School
Average Daily Membership

	2008/2009	2009/2010	2010/2011	2011/2012
Elementary	54.42	50.95	46	36.35
Secondary	48.85	39.98	32.45	29.25

School Report 2012 & 2013

Table 6.0.3

Roxbury Elementary School
Tuitioned Students

	2008/2009	2009/2010	2010/2011	2011/2012
Northfield School (M & H)	28	25	24	15
Local area schools (Randolph, Montpelier, U-32, Williamstown etc.)	25	14	6	9
Other (RAVEN, RTCC, Barre Vo. Tech, etc.)	5	6	4	7

Annual Report, Roxbury Vermont 2012

6.1 Roxbury Free Library

The Roxbury Free Library strives to provide quality reading and reference materials and scheduled educational programs for children and adults. The library provides Internet access as well as connection to the Vermont Automated Library System (VALS), which affords access to inter-library loan programs. The library provides one public access computer as well as wireless for laptop use. It also provides outreach service for patrons who are unable to come to the library.

Services and programs include Preschool Story Time, monthly adult book discussions, Summer Reading programs and special educational programs and classes. The library is run by part-time librarian and volunteers and is funded by the Town and by community donations. Grant money from the Vermont Council on the Humanities has enabled special programs to be presented. Through the *Reading Is Fundamental* grant, all preschoolers through sixth graders receive a book at no cost three times a year. The number of volumes is approximately 5000. The town residents expressed (through town meeting day and donations) support and were pleased with recent renovations and technological resources. The community will continue to have improved access to the library and its services. Library users will enjoy a varied collection of formats (books, books on tape/CD, videos and magazines, digital books) for borrowing. The Library also encourages the use of Universal class, a database of online classes, available free of charge to patrons. Stop in to the library and check out what they have to offer.

6.2 Historical Society

The Historical Society is housed in a small building that was for many years the Town Clerk's Office. This building is characteristic of the period when the Village center was settled. The building contains many items of historical significance to the town along with other memorabilia of years past.

6.3 Recreation

Due to its geography - both because of the narrowness of its valley and the flooding problem that exists in the village - Roxbury is limited in terms of the availability of open space for recreational purposes and facilities. Camp Windridge at TeelaWooket, the town's most well known recreational resource, is located at the north end of the village, and is renowned for its tennis, soccer and horseback riding programs, drawing campers from throughout the northeast and even other countries, but Roxbury residents have little access to its grounds or equipment.

Roxbury's most valuable recreational assets include its forest and conservation land which afford bountiful opportunities for hunting, fishing, hiking, cross-country skiing, snowmobiling, camping, horseback riding, bird watching, and mountain biking. One of the most popular and scenic bicycle loops in the state runs right through Roxbury on Rt. 12-A.

The Third Branch Conservation Park, located on Roxbury Flat (just south of the village) was established by a group of residents in 1999, and contains a small picnic area and recreation space. It has been suggested that the Planning Commission keep apprised of further opportunities for residents to pool resources and rescue scenic areas from development. About a half-mile south of the park is the Roxbury State Fish Hatchery, which is a favorite destination of residents, tourists, and great blue herons.

The Community/Senior Center has seen a considerable increase in use in the past few years. The seniors meet there for lunch weekly and on special occasions, and there's always a good community turnout for the monthly pot luck suppers. The building is also used regularly by the Girl Scouts, and has been the hub of special events, including Green-up Day and July 4th festivities. Also in recent years, the Roxbury Free Library has widened the scope of its impact on the town, featuring diversified programs; when it expects a large crowd at an event, it, too, will make use of the center. The town is fortunate to have a group of dedicated volunteers who have worked tirelessly, with success, to obtain grants to restore the building. Due in large part to the library and the Community Center, there has been a significant rise in the vitality of the town and in community spirit since our last town plan was written.

A survey conducted by the Planning Commission on Town Meeting Day posed the question, "Should the town establish other types of areas for recreational purposes?" An overwhelming majority of residents responded negatively, or were unsure. Many felt the town should make maximum use of its approximately 20 miles of woodland trails, and improve upon the sections that warrant it. Additionally, a group of residents are meeting regularly to rediscover and map ancient roads, both for their historical significance and as an added recreational asset to the town.

6.4 Law Enforcement

The Town of Roxbury has no police department. The Vermont State Police are available when needed, but do not provide comprehensive police services. The town does have a Constable, but that officer has no law enforcement authority. The Town Constable makes occasional checks on seasonal homes and hunting camps, assists the State Police in case of accidents and other emergencies, serves subpoenas and restraining orders, and receives occasional calls regarding nuisance situations.

The Selectboard has the responsibility of enforcing Town ordinances.

6.5 Fire Department

Fire protection services are provided by the Roxbury Volunteer Fire Department. It currently has 10 active volunteers that are on call to respond to fire emergencies and ambulance assists. Roxbury is a member of the Capitol Fire Mutual Aid System, consisting of 27 towns in Central Vermont. Roxbury has automatic response agreements

with Northfield fire and Sturchee fire only. Currently 6 members are certified in State of Vermont Fire Training.

In a typical year, the fire department responds to approximately 20 calls per year, half are Roxbury emergencies, 2 mutual aid calls. Generally, more than half of the calls are fire-related, with the rest related to traffic accidents. The Roxbury Fire Department facility was constructed in 1960/2000 with 3 bays. Currently there are five dry hydrant installations in Roxbury, with a new installation on Bull Run Rd that will be in service by the end of April.

Equipment owned by the Fire Department includes:

- 1250 gallon pumper (purchased in 2002)
- 1800 gallon tanker (purchased in 2011)
- 10 self contained breathing apparatus
- 1500 feet of hose
- forest fire equipment
- 1989 1st responder truck (looking to replace in 2014)

The department is I.S.O certified (at present time has a 9/10 rating. Dry hydrants to supplement fire fighting have been installed at the following locations:

- Tracey Hill Road
- Bull Run (currently replacing damaged hydrant)
- Northfield Road
- Premo Road

The fire department is currently looking for additional locations for dry hydrants on:

- West Hill Road

State funding is available for hydrant installation. Additional membership is needed to insure adequate coverage, especially for daytime fires. As a greater number of residents find employment outside of town, the challenge of adequate fire coverage by volunteer squad becomes a greater concern that needs to be addressed.

Current budgetary needs are being met. A fund for eventual purchase of a used First Response truck has been established, that should insure that replacement will be provided for when it becomes necessary.

Goal:

Continue to provide Roxbury with excellent fire protection services with trained volunteers and well maintained equipment.

Action Plan:

- Complete the installation of dry hydrants at the identified areas of greatest need.
- Use available opportunities to publicize/advertise the need for volunteers.
- Continue to support “the fund” on a yearly basis for eventual replacement of the 1989 First response truck

6.6 Health Care

Roxbury has a FAST squad comprised of local volunteers that provides a first response system for the Northfield Ambulance Service. The Green Mountain Family Practice in Northfield is the closest small medical facility for outpatient services. Central Vermont Home Health and Hospice, Inc. serves Roxbury citizens in their homes. Gifford in Randolph and Central Vermont Hospital in Berlin provide nearby hospital services.

6.7 Solid Waste

With the mandated closure of the unlined landfill located on Route 12A in Roxbury, individuals may pay local haulers, when available, or dispose of their solid waste at the Mad River Resource Management Alliance. Increased illegal dumping along the countryside and the accumulation of "junk" in yards has been one unfortunate result of the closure of the landfill. Roxbury is a member of the Central Vermont Solid Waste District and has a mandatory recycling ordinance.

The Town of Roxbury and its citizens have participated actively in Green-Up Day on the first Saturday each May to help combat this problem as well as continued general littering. Green Up Vermont is a nonprofit organization, first established in 1970, and it's been an integral part of Roxbury's community agenda nearly every spring ever since.

Green Up's mission is to promote the stewardship of our state's natural landscape and waterways, and the livability of our communities, while raising public awareness about the benefits of a litter-free environment.

We are gratified that Roxbury's eager participation in this endeavor grows every year, and we are committed to seeing that it continues to flourish, as our highways and byways become more pristine.

6.8 Sewage Disposal and Water Supply

The sewage and water systems for the Roxbury Village School also serve the Union Congregational Church and a few residences. All other sewage systems and water supplies, with the exception of systems serving the Town Offices and Town garage, are private. The septic system rules changed on July 1, 2007. Local jurisdiction over septic

system permitting ceased to exist on that date. All permits are issued by the State of Vermont. The Town of Roxbury no longer has the authority to issue septic permits for new systems, replacement systems, or repairs.

6.9 Town Administration

The small town of Roxbury has very little business revenue and relies on taxes to run the business of the Town. Roxbury is served by a Town Clerk, part-time assistant town clerk and a part-time Town Treasurer.

The three members of the Select board are elected by the voters to three year terms. The duties of the Select board are many and varied. They must warn Town Meetings, propose the town's budget and set the tax rate as well as enact and enforce ordinances and regulations. They appoint citizens to various town boards and to fill office vacancies until the next election. They are also responsible for hiring, directing and firing of non-elected town employees. The Select board authorizes town expenditures. The members of the Select board, along with the Justices of the Peace, are also members of the Board of Civil Authority.

The three Listers are elected officials whose terms expire in consecutive years. The Listers determine individual property assessments and create the Grand List on which the tax rate is based.

Additional elected Town Officers include three Auditors who, as part of their auditing functions, prepare the annual Town Report. Three School Directors are elected to manage the educational services of the town. The seven members of the Planning Commission are appointed by the Board of Selectmen.

6.10 Cemeteries

There are several cemeteries in Roxbury under the supervision of the Town. These are First Settlers' Cemetery, Orcutt Cemetery, West Hill Cemetery, East Roxbury Cemetery, Hayes Cemetery and the Roxbury Flats Cemetery. There is also a privately administered cemetery on Route 12A north of the village.

6.11 Child Care

To assist us in addressing child care infrastructure needs, the town will have to provide opportunities for 3 child care providers to enhance their programs through community resources and activities such as story hour for preschoolers in the library. Access to affordable, high-quality day care for young children is a basic need for both single and two parent families in Roxbury. The Roxbury Village School provides public pre-school for one year prior to kindergarten. The town should ensure that its policies encourage, rather than impede, provision of other private services. Consistent with this principle, provision for childcare facilities should be encouraged where reasonable operation is feasible and State licensing or registration is obtainable. It is important that these facilities are integrated appropriately into neighborhoods, especially where traffic, parking, noise, and other potential impacts would present unsafe or nuisance situations.

Our children are our future and their care and nurture has to be of paramount importance. Access to quality childcare is a basic need. Young children need ongoing nurturing and guidance from adults in order to flourish and be successful in life. In this fast-paced world of today, most homes are dependent on two incomes and children are cared for by dedicated professionals in registered or licensed homes, licensed centers, or schools. Without access, or financial means to a licensed or registered facility; grandparents, family members, or friends are often the alternative. Insufficient supplies of related childcare centers could impact negatively on Roxbury.

A query of Bright Futures Search Provider directory reveals that there are 5 licensed childcare programs for infants, toddlers, preschool and school age children within 15 miles; within 10 miles there is 1, Sugarbush Day School in Warren. A licensed program is defined by the state as a childcare program that offers care to children in an approved location. Licensed programs included early childhood programs, school-age cares, and even some family homes. The programs are inspected by the Department of Labor and Industry, Fire Safety Inspectors, and must obtain a Water and Wastewater Disposal Permit from the Agency of Environmental Conservation. Such a facility is considered a public building.

A query to the same online resource reveals that there are 10 (down from 23 in 2008) registered home daycares located within 10 miles of Roxbury, including two in Roxbury. A childcare home that is registered with the State of Vermont is a childcare program approved only in the provider's residence, which is limited to a small number of children based on specific criteria, e.g. no more than six (6) full time children.

The cost of childcare has increased due to the increased cost of living, liability insurance, and supplies. Childcare is difficult to find, especially for infant and school-aged care. Vermont has the highest percentage of women with children under the age of six (6) in the workplace in the United States, making the demand for childcare very important. Local establishments have provided public space and activities appropriate for pre-school aged children. The Roxbury Free Library hosts a weekly story hour in addition to unscheduled activities. The Roxbury Village School property has been available for pre-school programs organized with the school administration or with their approval. A few examples include early childhood music, science, and reading programs facilitated by Kindermusic, Mother Goose Programs, and Success-By-Six. There are undoubtedly more opportunities for activities and interactions in public settings that would enrich our young citizen's development and support their parents' childrearing responsibilities. There are a variety of reasons for a higher need of childcare opportunities than in the past, they are:

- weakened economy has forced the trend of seeing more both parents of young children in the work place
- supply of childcare centers has remained static, or in some areas decreased, making them unable to keep up with the demand

- changing culture where more people divorce and others chose to become single parents

There are several private daycare centers in Roxbury. The town will work to improve the childcare infrastructure. This may very well be achieved independently or in conjunction with neighboring towns.

6.12 Recommendations:

Goal: Be supportive of safe and nurturing childcare facilities

Objective 1. Maintain an inventory of all childcare programs in the town and their capacity;

Objective 2. Consider use of federal and state funds to assist with the development of childcare infrastructure;

Objective 3. Provide opportunities for childcare providers to enhance their programs

6.13 Senior Services

Roxbury senior citizens, aged 60 or older, may participate in a variety of programs and services offered through the Central Vermont Council on Aging or right here at our own Senior Center. Transportation is available through the Central Vermont Transportation Association "Wheels" program. Additionally, Roxbury senior citizens may participate in the programs sponsored by the Northfield Senior Center. Presently meals are served weekly to interested seniors at the Roxbury Community Hall.

6.14 Social Services

Roxbury Food Shelf is open and available to anyone in need (located in the basement of the Roxbury Congregational Church). It is open on the first and third Wednesday of the month from 12:30 to 4:30 or on an emergency basis.

6.15 Utilities

Central Vermont Public Service Corporation (CVPS) and Washington Electric Co-op provide electricity to Roxbury while some citizens are completely dependent on alternative energy. Our phone service, for most residents is through Northfield Telephone Company, a subsidiary of TDS Telecom; though many have opted for cell phones as their phone. The activities and choices of the area's utility companies can have direct and indirect impacts on land use (both locally and elsewhere). Locally, distribution line extensions can spur residential, commercial and industrial growth.

At present, there is no cable television service in town, but satellite service is common. However with the rise in cost of satellite service and the increased internet capabilities many are turning to the internet for their digital entertainment via Netflix, Hulu or stream the news from your favorite News providers' website.

6.16 Recommendations.

Goal: Improve communication and cooperation among town groups and officials.

Objective 1. Community members are encouraged to strengthen the links between home, community and school through their personal involvement.

Objective 2. The town encourages active volunteer membership in community organizations.

Goal: Increase recreational opportunities in Roxbury.

Objective 1. Community members are encouraged to work toward expanded use of existing community facilities and planned recreational activities for citizens of all ages.

a. In our outreach to expand recreational opportunities in the town, individuals should approach privately-owned Windridge at Teela Wocket Camp to determine whether their property could be utilized by community members. Individuals have been allowed to play tennis after getting permission and agreeing to leave the court swept and ready for play.

b. The townspeople should be assured continued use of the school, the Town Hall and Community Hall for recreational and community events.

Objective 2. Maintain recreational opportunities (walking, biking) along town roadways when they are consistent with other uses.

Objective 3. All public roads in Roxbury should provide for safe walking and biking.

Goal: Increase local services to townspeople.

Objective 1. Because many townspeople expressed concern about the need for enforcement of state laws and town ordinances, the Selectboard should continue to explore options for law enforcement.

Objective 2. The Town of Roxbury should assess the feasibility of setting up a local transfer station for solid waste and recyclable materials.

Goal: Encourage adherence to environmentally sound and aesthetically sensitive utility line or cellular tower construction and maintenance practices.

Objective 1. In the location or routing of new power and phone lines and substations, natural and cultural areas should be avoided, see Land Use Map for sensitive areas. Use of stealth design in cellular towers should be utilized.

Objective 2. The Town of Roxbury should consider the visual impacts of the setting of utility poles, cellular towers, and transmission and distribution line routes shall be designed to minimize aesthetic impacts. Use of wood support structures, appropriate conductor colors for the background, landscape compatibility techniques and direct burial is encouraged.

Objective 3. The Selectboard of Roxbury should consider prohibiting the use of herbicides for maintenance of utility rights of way within the town limits.

7. Energy

7.0 Energy Resources:

Energy resources in Roxbury include electricity provided by utility companies, as well as several independent residential systems. Various fuels are supplied by local and regional providers along with solar, wind, water and other renewable energy sources. Our forest also provides firewood for heat, agricultural uses and building.

Roxburys own Energy Committee has been very active. In 2012, with the help from Efficiency Vermont and CVPS/ Green Mountain Power as part of the Municipal Street Lighting Program, Roxbury antiquated streetlights were updated to brand new LED streetlights. The Energy Committee also completed the air sealing and weatherization of the Roxbury Senior Center/Community Hall thanks to a grant from CVRPC and the Department of Energy. Want to get involved, stay in touch via their Facebook page or contact the committee directly.

7.1 Electricity:

Central Vermont Public Service Corporation (CVPS) and the Washington Electric Co-Op supply electricity to the town. Both companies conduct conservation and demand-side management programs.

Three-phase service for industrial use is provided by CVPS from Randolph as far north as the Roxbury State Fish Hatchery, and by the Washington Electric Co-Op in a limited section through East Roxbury.

A number of households and seasonal units are not served by utility power lines, and in some cases generate their own electricity with independent systems.

As the Central Vermont Regional Plan notes, conservation is our least expensive and most environmentally benign source of electricity.

7.2 Heating Fuel:

According to the 2010 U. S. Census of the 300 owner occupied 241 listed their heating source; 87 units used firewood as their primary heating source, 131 used fuel oil or kerosene and 23 used LP gas. Municipal buildings are heated primarily with oil, with some use of propane.

Fuel oil, propane and kerosene are provided by one locally-based and two regionally-based companies. Firewood is supplied locally from Roxbury and surrounding towns. The predominance of the use of firewood as a primary or secondary heating source underscores the importance of maintaining our forest resources.

Close attention to energy conservation measures in the setting, design, construction or renovation, and maintenance of buildings could substantially reduce fuel use.

7.3 Transportation Fuel

Gasoline and diesel fuel are used for private and commercial transportation, agricultural uses, municipal road maintenance, and school buses. Since Roxbury is likely to remain a bedroom community, fuel use for commuter transportation is likely to increase as the population grows. It is possible, however, that the high percentage of residents who travel alone in a car could be reduced through ridesharing and forms of public transportation. Commuter transportation could also be reduced by the expansion of tele-commuting and tele-conferencing which would provide more opportunities for people to work from their homes. Home-based small businesses could also reduce the use of fuel used for transportation. Bike paths along the highways and improved sidewalks in the village area could decrease motorized vehicle use. Rapidly-developing electric & hydrogen vehicle technologies also hold promise for decreasing fossil fuel use through increased efficiency. Land use and settlement patterns that minimize transportation requirements, including the concentration of employment opportunities, housing and social services, could be encouraged.

7.4 Renewable Energy Sources

Wood burned for heat continues to be the most commonly used renewable energy source in the town. Solar energy serves as an auxiliary source of space and water heating, as well as a limited source of electricity through photovoltaic technology in a small number of privately owned independent systems. The high cost of fuel has 56 % of Roxbury residents in support of wind power according to the 2007 community survey. Future renewable energy potential also exists for methane production, expanded use of solar and micro-hydroelectric technologies, and increased use of biomass. This includes highly efficient boiler systems which burn wood chips, along with the use of emerging technologies, including hydrogen production and fuel cells. Municipal energy systems could be developed using wind power, biomass or other renewable technologies.

7.5 Recommendations

Goal: Encourage the conservation of energy resources.

Objective 1. Utilities Energy Conservation

- a. Encourage Roxbury residents to participate in Efficiency VT. By holding forums or writing articles for the local paper.
- b. Investigate energy-related grant and other programs, including those conducted by utility companies that may be available for municipal buildings.

Objective 2. Minimize transportation requirements to conserve energy.

- a. Encourage wider use of the rideshare lot that the town built in 2005 through a transportation grant. Through newspaper articles, the Planning Commission could help match up potential users of a rideshare program.

Assessment: While the park and ride does get use, it is sporadic at best.

- b. Encourage and support the safe use of Route 12-A as one of the state's major and most scenic bike paths, by obtaining and erecting "Share the Road" signs.
- c. Encourage the expansion of telecommunication systems to facilitate telecommuting and teleconferencing, and to meet communication needs of small businesses.

Objective 3. Encourage the development and expansion of renewable energy resources, while maintaining standards of environmental protection and public health.

- a. Ensure that renewable energy systems are given adequate consideration in regards to any minimum setback and sideyard requirements which may be developed through ordinance.
- b. Ensure that substantial consideration is given to protecting renewable energy systems from interferences cast by new structures and activities (solar access, etc.).
- c. Explore the potential development of municipal renewable energy systems.
- d. Encourage participation in Vermont's Use Value Appraisal Program to improve management of our forests and stimulate fuel wood production.
- e. Encourage the use of wind power by inviting knowledgeable people to address town forums on this topic.

Objective 4. Encourage and support recycling, composting, and reduced packaging, as they reduce overall energy consumption.

8. Government Finance

8.0 Revenues

As in most towns in Vermont, Roxbury derives its revenues from a combination of property taxes and various state aid programs (e.g. state highway aid, state aid to education). The proportion of the Roxbury budget (town, roads and school) supported by local property taxes has varied substantially over recent years. In the mid-1980s, property taxes supported 60-70% of the town budgets, while in the late 1980s this percentage dropped to about 42%, coincident with large increases in state aid to education. However, property taxes are again supporting the majority of town budgets as state aid to education funds have leveled off or declined, and expenses continue to rise. Act 60 contributes a very small amount to Roxbury.

The continued loss of state aid to education funding is placing an increasing burden on the town's ability to support its school costs. Considering the facts provided in the population and housing sections of this Town Plan regarding Roxbury's income levels and housing values, the classification of Roxbury as a rich town is unrealistic.

8.1 Grand List and Tax Rate

A town's wealth is measured by its grand list, which is the total assessed value of all taxable property. As of 1994, 47.9% of the grand list was attributed to town residents,

45.0% to non-Roxbury residents, and 7.1% to commercial operations. Since 1984, the Roxbury grand list has shown little change among years, with the exception of large increases in 1985 and 1992 associated with town-wide property value reappraisals.

A town tax rate is developed simply by dividing the amount of tax revenue approved by voters to meet town expenditures by the current grand list value. Due to this direct relationship, large increases in the grand list associated with reappraisals in 1985 and 1992 resulted in large decreases in the town tax rate.

Because all town grand lists may not represent current fair market values, the State Department of Taxes provides "Effective Tax Rates" to allow comparison of tax rates among towns. This comparison reveals that Roxbury has among the highest tax rates in the region (*Table 8.1.1*). The table shows the combined school and municipal tax rates.

Table 8.1.1
2013 Property Tax Rates

Town	Homestead Property	Nonresident Property
Barre City	1.2077	1.4407
Barre Town	1.3654	1.6661
Berlin	1.4537	1.4123
Cabot	1.5126	1.5171
Calais	1.5408	1.4741
Duxbury	1.4943	1.4963
East Montpelier	1.6608	1.4661
Fayston	1.4879	1.4177
Marshfield	1.583	1.6748
Middlesex	1.5074	1.6748
Montpelier	1.4343	1.4471
Moretown	1.5074	1.4194
Northfield	1.5363	1.655
Plainfield	1.4762	1.5618
Roxbury	1.1106	1.4964
Waitsfield	1.3848	1.3618

Source: Vermont Department of Taxes, Annual Report 2012

8.2 Recommendations

Goal: Provide for the municipal and educational needs of the town while maximizing the efficiency and cost effectiveness of these services.

Objective 1. Evaluate the potential impacts of future development and act to prevent development which would overburden the town's ability to provide facilities and services in a cost effective manner.

Objective 2. Explore alternate funding mechanisms for government facilities and services and maximize use of state, federal and private funding sources to supplement local tax revenues.

Objective 3. Encourage equitable allocation of state and federal financial aid programs (e.g. state aid to education).

Objective 4. Cooperate with neighboring and nearby towns in an effort to minimize costs and maximize benefits of government facilities and services where appropriate (e.g. fire and rescue; road maintenance; waste disposal/recycling, etc.).

Objective 5. Evaluate the benefits of developing a capital budget for town government facilities and services as a means of stabilizing tax rates.

Objective 6. Recognize the potential financial impact of a shift towards year-round residency on government facilities and services (e.g. higher school enrollments), attempt to maintain current composition of year-round residential property ownership.

Objective 7. Recognizing that undeveloped land does not burden the town with demands for facilities and services, evaluate the benefits of public investment in open lands.

Objective 8. The Town of Roxbury should support property tax reform to lessen the tax burden.

Objective 9. Determine what types of economic activities will provide increased job opportunities to residents, while not unduly burdening town resources (financial, environmental, etc.) and encourage those activities.

9. Land Use

9.0 Introduction

Historically the town was dependent upon its natural resources to support the population. In the early days land use was almost exclusively farming, forestry, fishing and quarrying. Today less than 3% of the working population derives their incomes from farming, forestry and fishing, while less than 80% of the work force is now employed elsewhere. Although the livelihood of Roxbury's residents has shifted away from working the land, the rural nature of the town is intact (it remains the most rural community in Central Vermont, with 17.1 persons per square mile) and is highly valued by its residents. It is Roxbury's rural character, forested and pastoral settings, which has

in part attracted new residents, and it is also considered the town's most valued attribute by long term residents.

For planning purposes, the Town of Roxbury is divided into three districts:

1) **Forest Reserve District:** created to conserve land for forest-based business, wildlife habitat management and recreation.

2) **Agricultural - Residential District:** created to provide for homes, home based small business and agriculture, while maintaining the pastoral rural appearance of Roxbury.

3) **Village - Limited Business District:** created to provide for higher density residences, higher traffic business, town services, community life facilities and limited small business in a central area.

In addition to specific guidelines provided within each land use district, future development within the Town of Roxbury should:

- Utilize the existing town road network
- Not result in a undue burden on municipal services
- -Avoid undue negative impacts of the town's natural and scenic resources
- Avoid areas within designated floodways or characterized by steep slopes (25 degrees or more)
- Not result in undue soil erosion
- Comply with all existing town ordinances, state and federal regulations

9.1 Forest Reserve District

The Forest Reserve District is all the land above 1800 feet in elevation and all state forest land. At present, this land area is almost totally covered with forests and has the least accessible areas with a few un-maintained Class 4 roads and logging trails (with the exception of Tracy Hill Rd., which is a Class 3 road). The area contains steep slopes, scenic ridges and large tracts of productive forests as well as extensive wildlife habitat, scattered camps and a few homes. For the most part, the soil is shallow with hard pan or bedrock within three feet of the surface.

Our forests are our most important natural resource. Over 80% of the town's surface is forested. Many of our residents in town heat their homes with wood and approximately just under 4% of the working population derives their income from some form of forestry. About one quarter of the town is owned by the State of Vermont, consisting largely of state forests. Another eighth is owned by paper companies. Approximately 29% of the town's total acreage is enrolled in the Woodland Use Value Appraisal Program. The townspeople value our forested land for its aesthetics and consider conservation of the forest lands a priority.

The use of the Forest Reserve District should be restricted in order to preserve this natural resource and aesthetic asset. At the same time, the lands should provide the maximum recreational opportunities. The following are steps to ensure the maintenance of our Forest Reserve District:

- a. Forestry should constitute prime use of this land, with importance placed on avoiding clear cut practices and on promoting conservation.
- b. Residential construction, with the exception of low impact seasonal camps, is discouraged in the area above 2000 feet.
- c. Recreational use should be encouraged for hunting, fishing, cross country skiing, snowshoeing, snowmobiling, hiking, cycling, horseback riding, etc.
- d. Wildlife habitat protection should be encouraged.
- e. Quality of water and streams should be maintained or improved.

9.2 Agricultural - Residential District

The Agricultural-Residential District comprises all of Roxbury below the 1800 foot elevation, excluding state forest land. The Village and Limited Business District is within the Agricultural-Residential District.

The Agricultural-Residential District contains most of the residences, farms and maintained roads. Geographically, the district is in three parts, each running north and south: 1) along the valley of the Dog and Third Branch Rivers (either side of Rt. 12A); 2) either side of the Bull Run stream bed and 3) in the east along Rt. 12 and Steel Hill Road. Much of the land along the Dog and Third Branch White Rivers are in the one hundred year flood plain (see Utilities and Facilities map) About one half of the Agricultural - Residential District is forested. The majority of open land and all farmland are found in this district. Recent residential growth has been in random and scattered patterns. Soils in much of the village and the land adjoining Rt. 12A is of a sandy texture, meaning that the agricultural attractiveness would be small. Only two families are enrolled in the Working Farm Tax Abatement Plan, and only eight families have registered a total of 269 acres in the Agricultural Use Value Appraisal Program. State statistics show only 52 acres in crops and 593 acres in pasture land, for a total of 645 acres of active farmland. Less than 2.4% of the town is used for agriculture. Roxbury is a rural residential town.

The town's population has experienced sporadic growth in the last three decades. This growth has essentially been in the Agricultural-Residential District. A 2007 survey of the population shows a desire to maintain our remaining rural and pastoral town with a mixed opinion on whether the town should grow or not. We must find a compromise that allows for increased dwellings while preserving the integrity of our landscape.

Most economic activity will be found in the Agricultural-Residential District. There will be increasing competition for the best building sites. The free market forces can ultimately determine the use of a particular parcel of land, but careful planning can create acceptable and limited restrictions that protect neighbors, maintain our character and allow for necessary growth.

It is envisioned that some of the land in this District would protect open lands, meadows, streams, wetlands and deer wintering areas (see Section 1). Examples of acceptable uses for land in the Agricultural-Residential District would include, but not be limited to, the small scale activities listed below:

- a. Forestry, woodlots, forest product manufacturing, sawmills, firewood, maple sugar stands
- b. Residential and seasonal homes
- c. Home-based offices, home-based arts and crafts
- d. Agriculture part-time farming, truck farms, farm stands, landscape nursery, cattle and/or sheep farms
- e. Lodgings, inns, bed and breakfast establishments
- f. Other small businesses
- g. Recreation facilities
- h. Extraction of stone, sand and minerals.

These uses could be compatible with residential areas and are part of the traditional Roxbury growth patterns.

9.3 Village and Limited Business District

The present village and its immediate surrounding area are the center for commercial, community life and essential services, and should be expanded to allow for future growth. The Village and Limited Business District would accommodate higher density residences, higher traffic business and small industry.

The village presently houses Town Offices, a post office, fire department, school, library, church, Senior Center and Historical Society as well as several small businesses. It is located at the intersection of two principal roads--Vermont Route 12A and the Warren Mountain Road--and is the site of the railroad siding.

Surveys show that the townspeople would like to see a revitalization of the center of the town and would like to develop a sense a pride in its appearance. It has also been expressed that revitalization would assist in providing a better sense of community, and that there is a need for additional quality retail facilities, a solid waste transfer station, expanded recreational facilities and possibly a medical clinic. It has been further suggested that a need exists for the expansion of business opportunities to provide both an increased tax base and local employment. Several persons have suggested a restaurant, professional offices, nursing home, child care center and a bed and breakfast establishment. All such businesses are appropriate for a central location in the immediate vicinity of the village.

The concentration of business growth and expanded service in a central location is convenient. Co-location allows separate activities to benefit from the proximity of the others. The present village site has the potential of a local growth_center because of existing facilities, central location and a road network. However, there are some major disadvantages: pockets of flood plain, areas with a high water table, and the lack of a public water and sewage system.

While the problems are considerable, we should work to resolve them. Abandoning the village and its current facilities is not realistic and no other site has the central location and transportation advantages as does the village. The village is a major asset and well worth saving. If we are to achieve controlled growth there must be enforcement of the

existing statutes and careful development of new measures to control growth. Otherwise, we may lose the opportunity to save what remains of our unique village and the rural character of our town to strip development and uncontrolled, poorly planned business growth throughout the entire town.

The successful creation of a Village and Limited Business District is dependent upon a carefully developed plan. The addition of new facilities and activities to the village must ensure that the residential character is not violated. The plan for growth in the village should be consistent with traditional village patterns and take careful consideration of the aesthetic impact of combining residential and commercial buildings. There are methods of making these competing interests compatible, such as set back provisions, screening, cluster development and small lots, etc.

9.4 Recommendations

Goal: Maintain and preserve the town's rural residential character of a compact village surrounded by rural countryside.

Objective 1: Investigate need for land-use regulations which recognize distinct districts and regulate land use activities to ensure compatibility with the purpose of the respective districts.

- a. Consider applying for Village Designation Status.
- b. Maintain the Forest Reserve District for the purpose of protecting significant forest resources and headwater streams and to limit development in areas with steep slopes, shallow soils, wildlife habitat, fragile features, scenic resources and poor access to town roads, facilities and services.
- c. Maintain the Agricultural-Residential District for the purpose of encouraging low density residential development; encouraging moderate or high density residential development in appropriate locations and designs (i.e. along existing roadways and where town services are easily accessed), encouraging continued agricultural forestry practices; and for the preservation of rural resources and natural features.
- d. Maintain and expand the Village and Limited Business District with higher density mixed use development in a classic village setting in a manner compatible with the historic character of the village.

Objective 2: Reinforce Village and Limited Business District as the town's growth center.

- a. Encourage a full mix of commercial, public and residential land uses in the village.
- b. Encourage the in-fill development of vacant land in the village in a manner which reinforces a village scale development pattern.
- c. Evaluate the potential for allowing higher residential densities on lands within the Agriculture-Residential District adjacent to the Village.

- d. Develop ordinances that are not unnecessarily restrictive development standards (i.e. setbacks, building coverage, density, parking requirements, etc.) in the village.
- e. Implement the community facilities, transportation, housing and economic development objectives and strategies of this Plan as a means of reinforcing the function and viability of Roxbury village.
- f. Identify existing limitations and potential solutions, including funding sources, for full implementation of goals and objectives identified within this Plan for the Village and Limited Business District.

Goal: Manage land use in order to encourage protection of open lands, support for commercial business, revitalization of the village, protection of the forests, streams and wildlife habitat.

Objective 1: Promote the efficient use of land and inhibit the further suburbanization of our rural landscape.

- a. Investigate possible subdivision regulations and ordinances that would ensure that the pattern of future development does not adversely impact the town's natural features and rural resources and scenic character. To this end, such means as clustering, flexible development standards, and the preservation of significant features through conservation easements and/or protective deed covenants should be employed.
- b. Investigate subdivision regulations and ordinances that would require that new residential development does not adversely impact the town's rural character and natural and scenic resources. To this end, such means as buffering, screening, careful site selection, limited densities and minimum road frontage (to prevent "spaghetti lots") should be employed.
- c. Discourage land subdivision and consequent residential development in the Forest Reserve District.
- d. Through an ongoing planning process, ensure that capital improvement planning is coordinated with land use planning.
- e. Implement all objectives and strategies set forth in the Town Plan regarding the preservation of the town's rural character, natural and scenic resources, and the continued viability of farming and forestry.

Goal: With citizen participation, establish a reasonable balance between land use planning and rights of individual land owners.

Objective 1: To balance the necessary restrictions of land use regulations with the reasonable expectations of landowners.

- a. Ensure that local regulation does not deny the reasonable use of property and that restrictions imposed on land use are based on clearly defined community objectives.

- b. Continue administering and enforcing the Town's ordinances and regulations, and reviewing those ordinances on a regular basis and making revisions as deemed appropriate.

10. Regional Cooperation

10.0 Overview

The existing and proposed Town Plans for the communities of Warren, Braintree, Granville/East Granville, Brookfield and Northfield have been reviewed to identify any incompatibilities. The town of Roxbury is committed to working cooperatively with neighboring towns to address issues of mutual concern and to avoid conflict. The Planning and Development Act goals established in 24 V.S.A. §4302 are the basis for the Roxbury plan. The Statute generally requires a Town Plan to be compatible with those of the neighboring communities and with the regional Plan. As the term “compatibility” is defined, the Roxbury Plan will not reduce the desired effects or implementation of the regional Plan, or the town plans of neighboring communities. Roxbury’s new Town Plan is consistent with the development patterns in adjoining communities, each community was provided with a copy of the proposed Roxbury Town Plan for its review. It is intended that this Roxbury Town Plan be reviewed by the Regional Planning Commission under 24 V.S.A. § 4350.

Warren:

The Roxbury Town Plan is intended to provide guidelines for planning and coordination of review of the natural and economic features of our two towns. The Roxbury Town Plan is viewed as a companion document to the Warren Plan

Braintree:

With particular regard to land use districts and other general development policies that may be affected and no conflicts have been identified.

Granville/East Granville:

Though the town of Granville is actually separated from Roxbury by a mountain range and 25 miles of highway, the tiny village of East Granville is located 6 miles to the south on Route 12A. In reviewing Granville’s Town Plan, we find it utterly consistent with Roxbury’s, in its commitment to preserve outstanding scenic areas as well as to discourage developments that have an undue adverse impact on the land’s resources.

Brookfield:

Roxbury shares its entire eastern rural edge with Brookfield. Both towns encourage development as long as it does not overburden town services or disturb the towns’ rural character. Communication between towns will be crucial as both Route 12 and Steele

Hill Road, both located on the edge of each town line, provide ample opportunity for growth.

Northfield:

Geographically, in our rural setting the Northfield Town Plan is compatible with the Roxbury plan. There may be opportunities to partner with Northfield on some initiatives as they have quite a positive outlook on solar and wind energy. Given the connections that already exist between the two communities (schools, drug free initiatives, newspaper), Roxbury should plan on having one or two of our Planning Commissioners attend a meeting of Northfield's Planning and Zoning, to articulate our willingness to cooperate on any initiatives that align.

2014 Planning Commissioners

Kim Livellara, Chair

Claire Chomentowski

William Ray

Nik Sargent